

# EDUCATION (ED)

## Courses

### ED 155 Teaching, Learning, Leadership (3)

This course is designed to acquaint students with the education profession and to help them develop a realistic understanding of teaching, learning, and leadership. Students will examine motives for teaching, explore the qualities of effective teachers and leadership, and discuss the various diversities teachers encounter as well as the implications for teachers and learning. Students will begin to identify strategies and options for successful classroom practice. Ethical, legal, and controversial issues affecting education today will be addressed along with how to become a teacher leader in the profession. Prerequisite: None.

### ED 165 Ed. 1, Examining Teaching as a Profession: Diversity 1, Literacy 1, Technology 1 (3)

First in a series of four courses that comprise the foundational education program for future teachers. The four courses address four topics that are essential to establishing and maintaining a successful learning environment: Classroom Management, Diversity, Literacy and Technology. Topics in the first phase are centered around diversity, literacy, and technology. The foundational courses are sequential in nature and build upon the previous course. The courses are intended to be taken in consecutive semesters.

### ED 217 Introduction to STEM and STEM Education (3)

This course, introduces the history and current state of STEM (Science, Technology, Engineering and Mathematics) and STEM education while giving students the opportunity to explore the various components of STEM and STEM careers. A strong emphasis is placed upon critical STEM areas (specifically underrepresented populations in STEM and how STEM impacts people and the environment) and STEM in the Community. Students will explore various STEM careers. Prerequisite: None.

### ED 275 Ed. 2 Exploring Teaching as a Profession (Classroom Management 1, Diversity 2, Technology 2) Ed. 2 (3)

Second in a series of four courses comprise the foundational education program for future teachers. The four courses address four topics that are essential to establishing and maintaining a successful learning environment: Classroom Management, Diversity, Literacy and Technology. Topics in this phase are centered around further building on diversity and technology, and introducing classroom management. The foundational courses are sequential in nature and build upon the previous course. Corequisite: ED 165

### ED 285 Educational Psychology (3)

The purpose of this course is for students to develop a working knowledge of theories, concepts and models derived from the discipline of psychology as they apply to teaching, learning, and other aspects of educational practice. In addition to theories of learning, motivation, intelligence, students study child and adolescent development. Students also address social, cultural, and family influences on human behavior and human development as well as the experiences of diverse student populations in school settings. ED 285 must be taken prior to admission to the Professional Teacher Education Program. Prerequisite: None.

### ED 290 The Whole Child (3)

The Whole Child is an educational child psychology-oriented course which looks at the whole child from birth to age 12. The course explores the developmental levels of the elementary child along with the academic, physical, and social-emotional areas of the child in relation to educating the whole child.

### ED 295 Ed. 3 Experiencing Teaching as a Profession (Classroom Management 2, Diversity 3, Literacy 2) (3)

Third in series of four courses comprise the foundational education program for future teachers. The four courses address four topics that are essential to establishing and maintaining a successful learning environment: Classroom Management, Diversity, Literacy and Technology. Topics in the third phase are centered on reinforcing and enhancing previously covered topics in classroom management, diversity, and literacy. The foundational courses are sequential in nature and build upon the previous course. Prerequisite: ED 275. Corequisite: ED 395.

### ED 301 Classroom Management, Safety, Planning, Pedagogy (3)

This course is a stand-alone course for individuals who need some background in classroom management, safety and planning. The course will provide or strengthen a solid foundation for individuals who are currently or soon to be professional teachers/instructors. Specifically the course will address the needs of individuals who require some additional support in these areas or are teaching under provisional licenses and have not yet completed a licensure program.

### ED 302 Teaching Exceptional Learners (3)

A survey of the characteristics and educational needs of all types of exceptional learners, with particular emphasis given to those students included into the regular classroom. Instructional strategies and appropriate resources for various exceptionalities are explored in detail. Prerequisite: Admission to teacher education.

### ED 310 Teaching Math in Elementary School (3)

One course in the unified block in the teaching of mathematics and science. Investigates general content and teaching strategies for each strand of the elementary mathematics program. Problem solving and mental computation will be integrated and the development and use of manipulatives will be stressed. Current curriculum trends and the role of will be explored. Prerequisites: Admission to teacher education and a grade of "C" or better in both MA 112 or MA 116 and MA 228; Concurrent enrollment in ED 315 and ED 317.

### ED 314 Chemistry Methods for STEM Edu (3)

This course is designed for pre-service education students and covers a range of chemistry topics related to curriculum and instruction at the middle or secondary grades level. It includes planning instruction, instructional methods and strategies, managing the classroom, assessing student performance, and working with others in the school environment, especially pertaining to the teaching of chemistry. Students are also required to participate in a 6 week observation/practicum and experience actually teaching several lessons in the student's major area. Corequisite: CH 317

### ED 315 Teaching Science in Elementary School (3)

One course in the unified block in the teaching of mathematics and science. Methods and materials for teaching knowledge, processes, and applications in physical, earth and life sciences will be developed. Emphasis will be placed on activity-oriented programs. Prerequisites: Admission to teacher education, PS 126, BI 100, and BI 101; Concurrent enrollment in ED 310 and ED 317.

### ED 317 Math/Science Practicum (2)

A supervised field experience in the teaching of mathematics and science in the elementary grades. Prerequisites: Concurrent enrollment in ED 310 and ED 315, and admission to teacher education.

**ED 318 Earth/Space Science for STEM E (3)**

This course is designed for pre-service education students and covers a range of Earth and space science topics related to curriculum and instruction at the middle and secondary level. It is designed to be taught in conjunction with Earth/Space Science for STEM Educators (PS 318). It includes planning instruction, instructional methods and strategies, managing the classroom, assessing student performance, and working with others in the school environment, especially pertaining to the teaching of chemistry. Students are also required to participate in a 6 week observation/practicum and experience actually teaching several lessons in an Earth/Space science classroom. CO-REQUISITE: Earth/Space Science for STEM Educators (PS 318)

**ED 319 STEM Practicum I (1)**

Catalog Description: Supervised field experience in the teaching of STEM in the middle grades. ED 319 will be taught in conjunction with BI 319 (or an approved substitute). The course will focus on the Biology course content as it relates to teaching the content at the middle grades level. Prerequisite: Admission to Professional Teacher Education Program. Concurrent enrollment in BI 319

**ED 320 Science of Reading I (2)**

The theory and practice of teaching reading including word attack, comprehension, and study skills. Special emphasis is given to the use of basal and other instructional materials in regular and special reading classes. Prerequisite: Admission to teacher education, ED 310 and ED 315. Corequisites: ED 325, ED 327, ED 330, ED 354

**ED 321 STEM Practicum II (1)**

Supervised field experience in the teaching of STEM in the middle grades. ED 321 will be taught in conjunction with EG 320 (or an approved substitute) and will focus on the course content as it relates to teaching the content at the middle grades level. Prerequisite: Admission to Professional Teacher Education Program. Concurrent enrollment in EG 320 or approved PY or EG course.

**ED 322 Social Studies Content for Elementary Educators (3)**

Social Studies Content for Elementary Teachers provides a broad foundation of social studies topics covered in the elementary school classroom. The focus of the course will emphasize the big four disciplines addressed in social studies—History (including American History and World History), Government and Civics, Geography and Economics.

**ED 325 Teaching Language Arts & Children's Literature (2)**

The theory and practice of teaching oral and written communication skills. Special emphasis is given to the interrelationship between literature for young people and the language arts skills of listening, speaking, reading and writing. Prerequisite: Admission to teacher education; Concurrent enrollment in ED 320 and ED 327.

**ED 327 Science of Reading II (3)**

A supervised field experience in the teaching of literacy skills in the K-6 classroom. Prerequisite: Admission to teacher education; Concurrent enrollment in ED 320 and ED 325.

**ED 330 Teaching Social Studies through Integrating Curriculum (3)**

This course includes content, methods, and learning theory for effective social studies instruction. Methods for integrating social studies instruction with other content areas, including the arts will be addressed. Special attention is given to methods which promote critical thinking abilities necessary for participation in a diverse democratic society. Prerequisite: Admission to teacher education, ED 310 and ED 315. Corequisite: ED 320 and ED 337.

**ED 335 Creative Experiences in Early Childhood Through Middle School (3)**

Explores various elements of aesthetics, including art, music, drama, dance, and movement and the relationship of such activities to the teaching-learning environment. Emphasis will emphasize use of creative activities to enrich other content areas. Prerequisite: Admission to the Professional Teacher Education Program. Corequisites: ED 310 and ED 315.

**ED 337 Social Studies Practicum (1)**

One course in a unified block in the teaching of social studies and aesthetics. This course requires students to develop and teach social studies lessons in the elementary school classroom. Prerequisite: Admission to teacher education. Corequisites: ED 330 and ED 320.

**ED 340 Teaching in Adolescent Middle Level Environment (2)**

Understanding the unique nature of middle level education will be the focus of this course. Based upon readings, field experience, and class discussion, students will study the nature of adolescent development, curriculum and instruction, programs and collaborative interactions that support an effective middle school program. Prerequisite: Admission to teacher education; Concurrent enrollment in one of the following practicum sections, ED 346, ED 348 or ED 349.

**ED 346 Middle Level History Practicum (1)**

A supervised field experience in the teaching of history in the middle level classroom. Prerequisite: Admission to teacher education; Concurrent enrollment in ED 340.

**ED 348 Middle Level English/Language Arts Practicum (1)**

A supervised field experience in the teaching of English/Language Arts in the middle level classroom. Prerequisite: Admission to teacher education; Concurrent enrollment in ED 340.

**ED 349 Middle Level Mathematics Practicum (1)**

A supervised field experience in the teaching of mathematics in the middle level classroom. Prerequisite: Admission to teacher education; Concurrent enrollment in ED 340.

**ED 350 General Secondary Methods (3)**

Extensive laboratory and simulated classroom experiences with field-based observation. All secondary majors are required to have at least one methods course, and this course fills the basic requirement when a "special area" methods course is unavailable. All students who enroll in this methods course participate in a field-based teaching experience at various secondary schools. Prerequisite: Admission to teacher education.

**ED 353 Assessment & Evaluation in Early Childhood Education (3)**

Students in this course will learn how to assess and evaluate young children's development and learning. Typical assessment procedures appropriate for children from birth through third grade will be studied. Techniques will be developed to record children's behavior individually and in group settings. Prerequisite: Admission to teacher education.

**ED 354 Curriculum and Assessment (3)**

The curriculum and assessment course provides students with an opportunity to examine how to design implement and assess curriculum to address the needs of all learners. Prerequisites: Admission to Teacher Education and ED 275.

**ED 362 Methods of Teaching English in Secondary School (3)**

The study of and practice in the methods of teaching literature, language, and writing, in the secondary schools. Major concerns include teaching theory; the relationship between oral and written language; language development; language used in various social, regional, and cultural settings; curriculum development and evaluation; and the assessment of students' progress in reading and writing. Students participate in a field-based experience at various secondary schools. Prerequisites: Admission to teacher education and permission of the instructor.

**ED 363 Methods of Teaching Math in Secondary School (3)**

Principles and methods of teaching the process and content of secondary school mathematics. Includes emphasis and training in general mathematics, algebra, geometry, as well as advanced mathematics. All students who enroll in this course participate in field based teaching experiences at various secondary schools. Prerequisites: Admission to teacher education and permission of the instructor.

**ED 366 Methods of Teaching Social Studies in Secondary School (3)**

Principles and methods of teaching the process and content of the social studies. Includes emphasis and training in locating information, developing instructional units, and using instructional aids. All students enrolled in this course participate in field-based teaching experiences at various secondary schools. Prerequisites: Admission to teacher education and permission of instructor.

**ED 368 Methods of Teaching Foreign Language (3)**

Principles and methods of teaching foreign languages. Extensive laboratory and simulated classroom experiences with field experiences with field based observation. Discussion of problem situations observed in the classroom. Emphasis given to proficiency oriented teaching of various target languages, developing instructional units, use of multimedia resources, and principles of foreign language testing. Prerequisites: Admission to teacher education and permission of instructor.

**ED 369 Student Teaching in Preschool Education (3)**

A supervised field experience in a pre-school setting and a seminar exploring child development issues. This course includes planning, teaching, and assessing developmentally appropriate activities for preschoolers in field placements. Prerequisite: ED 160, ED 343, ED 345, and admission to the Professional Teacher Education Program. Concurrent enrollment in ED 367.

**ED 395 Ed. 4 Extending Teaching as a Profession (Classroom Management 3, Literacy 3, Technology 3) (3)**

ED 395 Ed 4. Extending Teaching as a Profession (3) Fourth in series of four courses comprise the foundational education program for future teachers. The four courses address four topics that are essential to establishing and maintaining a successful learning environment: Classroom Management, Diversity, Literacy and Technology. Topics in the fourth phase are centered on reinforcing and enhancing previously covered topics in classroom management, literacy and technology. The foundational courses are sequential in nature and build upon the previous course. Prerequisite: ED 275. Corequisite: ED 295.

**ED 410 Secondary Student Teaching (6-12)**

Directed and supervised teaching of content in 6-12 classrooms. Students are assigned to Topeka and neighboring schools for a period of twelve weeks. Not available for graduate credit. May be taken on a Pass/fail basis only. Prerequisites: Completion of appropriate professional education courses, and teaching specialization courses, and admission to student teaching.

**ED 415 5th-8th Grade Student Teaching (4-12)**

Directed and supervised teaching of content in 5-8 classrooms. Students are assigned to Topeka and neighboring schools for a period of six to twelve weeks. Not available for graduate credit. May be taken on a pass/fail basis only. Prerequisites: Completion of appropriate professional education courses, middle school teaching content courses, and admission to student teaching.

**ED 420 K - 6 Student Teaching (8-12)**

Directed and supervised student teaching for a minimum 8 weeks in a K-6 classroom. Not available for graduate credit. May be taken on a pass/fail basis only. Prerequisites: Completion of appropriate professional education courses, and teaching specialization courses, and admission to student teaching.

**ED 430 Student Teaching Birth to Grade 3 (4)**

Directed and supervised student teaching in a kindergarten through grade three educational setting. Not available for graduate credit. May be taken on a pass/fail basis only. Prerequisites: Completion of appropriate professional education courses, and teaching specialization courses, and admission to student teaching.

**ED 440 Student Teaching Grades P-12 (4-12)**

Directed and supervised student teaching in grades Pre-Kindergarten through grade 12 educational setting. Not available for graduate credit. May be taken on a pass/fail basis only. Prerequisites: Completion of appropriate professional education courses, and teaching specialization courses, and admission to student teaching.

**ED 450 Methods & Cross-Cultural Communication (3)**

Emphasis on practical methods of teaching English as a Second Language and strategies for working with speakers of other languages. Includes a review of resource materials, lesson planning, and in-class teaching practice as well as an analysis of problems posed by conflicting cultural and language habits. Prerequisites: Admission to Teacher Education.

**ED 461 ESOL Assessment Administration Teacher Education (2)**

This course focuses on language assessment theory and practice in ESOL settings. The content of the course will include purposes for assessment, types of assessment including alternative assessment and construction of assessment instruments. Central issues in the assessment of language will be presented and analyzed. Prerequisite: Admission to the program.

**ED 463 ESOL Teaching and Learning (3)**

This course is designed to provide students with a critical understanding of instructional delivery which caters for the linguistic and literacy needs of minority/heritage communities. The focus of this course is located within postmodernist principles of cultural capital, discursive practices and difference. Students will be required to engage with the political debates and resultant educational ramifications concerning bilingual education, dual language programs, ESOL education, as well as other issues such as power and inequalities in language education. This sociocultural-critical theoretical framework will provide students with the basis to then negotiate issues of second language learning, critical pedagogy, language varieties, multicultural communities as well as critical literacy and reading development. Prerequisite: Admission to the program.

**ED 464 ESOL Practicum-Assessment & Administration Teacher Education (3, 4)**

A supervised clinical experience with three ESOL learners of different levels (one elementary level learner, one middle level learner, and one secondary level learner). Students administer tests, analyze data, determine the learners' strengths and weaknesses, develop instructional plans for each learner, select and implement appropriate strategies and materials, and assess progress towards instructional goals using skills developed as critical and reflective professionals. Appropriate conduct is maintained with parents and classroom teachers with oral or written reports as deemed appropriate. Prerequisites: ED 450, ED 463, ED 461, and ED 462.

**ED 466 Linguistics for ESOL Teachers (3)**

This course provides an introduction to language as a system, with a particular focus on teaching English as a second language to students in public schools, in grades P-12. Among the topics addressed are: first and second language acquisition processes; English phonology, morphology, syntax, and discourse; implications for teaching English language learners the four language skills – listening, speaking, reading, and writing; and implications for teaching content-specific language (math, science, social studies). Prerequisites: Admission to Teacher Education.

**ED 474 Special Topics in Education (0-3)**

Courses in special topics that will vary from semester to semester and will be announced in advance. ED 474 may be taken for more than one semester. Prerequisite: Permission of the Department Chairperson.

**ED 497 Independent Study in Education (1-3)**

Intensive guided study in a special topic in education. Independent Study in Education is available only to candidates for teaching licenses. Prerequisites: Admission to an approved program of study and written approval of the Chairperson of the Department of Education.

**ED 601 Adult Learning Theory and Practice (3)**

This is a stand-alone course for individuals who seek to develop and/or deepen their knowledge of Andragogy (method of practice of teaching adult learners) to effectively teach adults through the use of Best Teacher Practices. This course will provide and/or strengthen a teaching foundation for individuals who are currently, or will soon to be, professional educators.

**ED 614 Guidance in Elementary/Secondary Schools (3)**

Role of the classroom teacher and administrator in guidance and counseling program of the elementary/secondary school. Emphasis on unique needs of elementary children in regular, mainstream, and special classes. Prerequisite: Permission of the instructor.

**ED 621 Educational Planning (3)**

Introduction to programming, planning and scheduling procedures to structure the learning environment for students with learning and behavioral problems. Emphasis on establishment of procedures for laws and regulations, regular class integration, student and teacher time management, class scheduling, grading practices, and student/program evaluation. The Individual Educational Planning (IEP) process and training in development of computerized IEP included. Prerequisites: SE 610

**ED 633 Advanced Child Development (3)**

Advanced course in theory and basic concepts of child development. Topics include assumptions and principles of five major approaches: normative-maturation, psychoanalytic, social learning, cognitive-development and behavior analysis. Includes historical background of developmental theory and cross cultural perspectives. Prerequisites: Graduate standing.

**ED 641 Language and Literature Development in Early Childhood Education (3)**

Students identify speech and language behaviors which are developmentally appropriate for young children birth to age eight. Students identify and practice methods and techniques necessary to foster listening, speaking, pre-writing, pre-reading, and pre-math skills in children birth to five years of age.

**ED 644 Art in Elementary/Middle School (3)**

Understanding the purpose behind the creative process as it applies to teaching and evaluating art produced by the child. Relates various art experiences to students' developmental and emotional level. Applies elementary, middle, and secondary art experiences to the "regular" classroom.

**ED 645 Introduction to Craft Techniques (3)**

Lectures and demonstrations covering a variety of craft materials utilized in the elementary, middle, and secondary schools. Includes experience and practice with block printing, fabric art, casting and molding techniques, and safety standards associated with the craft production.

**ED 647 PreKindergarten and Kindergarten Methods (3)**

Focus on methods and materials that support physical, emotional, social and intellectual needs of the kindergarten and pre-kindergarten child.

**ED 650 Graduate Seminar (3)**

This course serves as an orientation to the Washburn Teacher Education Program as well as an exploration of the teaching profession for students pursuing an initial teaching license at the graduate level. Students will be introduced to the social, historical, and philosophical foundations of education, as well as a variety of teaching models, and the planning and assessment practices expected of all teachers. A review of influences on P-12 students' individual family, and community characteristics on the teaching and learning process will also be explored. The process for developing the education department required professional portfolio is included. A minimum of a 35 hour school/community field experience is required. Prerequisite: Concurrent enrollment in ED 660.

**ED 651 Language Problems of non-English Speakers (3)**

Emphasis on practical methods of teaching ESL and strategies for working with speakers of other languages. Includes a review of resource materials, lesson planning, and in-class teaching practice as well as an analysis of problems posed by conflicting cultural and language habits. May be taken for undergraduate credit and EN 499 for graduate credit.

**ED 652 Cognitive & Language Development (3)**

Emphasizes study of two essential areas of human development as they apply to early childhood teaching and learning: theoretical perspectives and research on cognitive and language development and instructional knowledge which provides understanding of teaching and learning that demonstrate instructional strategies grounded in theory and research.

**ED 653 Assessment & Evaluation in Early Childhood Education (3)**

Students learn ways in which young children's development is assessed and evaluated. Typical assessment procedures appropriate to children to age eight are studied. Techniques are developed to record children's behavior individually and in group settings. Prerequisite: Graduate standing.

**ED 660 Advanced Educational Psychology (3)**

Explores advanced topics in educational psychology as they apply to teacher practice. Topics include learning theory, child and adolescent psychology, theories of motivation and achievement, and social and cultural influences on learning and development. Part of the graduate core curriculum. Prerequisite: Consent of instructor.



**ED 661 Exceptional Infants & Young Children (3)**

Survey of exceptionalities including etiology, curriculum, identification, adaptation of materials and environments, play, referral and development of an individual educational plan (IEP). Prerequisite: ED 343 or equivalent course in child development.

**ED 662 Methods of Teaching English-Secondary (4)**

Study of and practice in the methods of teaching literature, language, and writing in the secondary schools. Major concerns include teaching theory; the relationship between oral and written language; language development; language used in various social, regional, and cultural settings; curriculum development and evaluation; and the assessment of students' progress in reading and writing. Students participate in a field-based experience at various secondary schools. Prerequisite: Admission to the Professional Teacher Education Program or consent of instructor.

**ED 663 Advanced Social Studies (3)**

Advanced survey and analysis of issues and practice of social studies education in elementary/middle school. Innovative approaches for teaching history, social issues, psychology, political science, anthropology, and/or philosophy in the classroom are explored. Emphasis on the content and materials of a variety of topics within the social science field. May be taken for undergraduate or graduate credit.

**ED 665 Introduction to Educational Research (3)**

Introduces graduate students to basic information needed to understand processes to plan, conduct, and report research on education-related issues and problems. Focus on increasing students' appreciation of the field of educational research, while increasing their ability to interpret and evaluate published research studies. Both qualitative and quantitative research methodologies are reviewed. Part of the graduate core curriculum.

**ED 667 Curriculum Development and Evaluation - Elementary Education (3)**

Examination of social and psychological influences upon curricular design and implementation. Emphasis on study of the societal forces which affect school curricula, prominent instructional models and supporting theoretical rationale, barriers on implementation of innovative curricula, and systematic evaluation of educational programs. Students review the process of curricular modification from a perspective integrating theory and practice.

**ED 669 Curriculum Development and Evaluation - Secondary Education (3)**

Examination of social and psychological influences upon curricular design and implementation. Emphasis on study of the societal forces which affect school curricula, prominent instructional models and supporting theoretical rationale, barriers on implementation of innovative curricula, and systematic evaluation of educational programs. Students review the process of curricular modification from a perspective integrating theory and practice.

**ED 670 Curriculum Development and Evaluation - Middle/Secondary School (3)**

Examination of social and psychological influences upon curricular design and implementation. Emphasis on study of the societal forces which affect school curricula, prominent instructional models and their supporting theoretical rationale, barriers on implementation of innovative curricula, and systematic evaluation of educational programs. Students review the process of curricular modification from a perspective integrating theory and practice. May be taken for undergraduate or graduate credit.

**ED 671 ESOL Teaching and Learning (3)**

This course will provide an overview of curriculum and instruction as it relates to ESOL learners. Candidates will learn appropriate teaching strategies and subject matter content relevant to this population. An emphasis will be placed on understanding language and literacy acquisition and working with students with special needs.

**ED 672 Issues in Modern American Education (3)**

Critical analysis of contemporary problems and issues in American education. Consideration of historical, sociological, and philosophical foundations affecting problems and issues included. This course is part of the graduate core. Prerequisites: Consent of instructor.

**ED 674 Special Topics/Education (0-3)**

Courses in special topics which will vary from semester to semester and will be announced in advance. ED 674 may be repeated for credit. Prerequisites: Permission of Department Chairperson and the instructor.

**ED 678 Organization & Administration of Early Childhood Education Program (3)**

Organization and administration of early childhood programs. Emphasis on supervision of volunteers and paraprofessionals. Introduces the student to techniques for organizing staff as an instructional Early Childhood Education team.

**ED 680 Integrating Technology in Curriculum (3)**

Presents students with principles underlying selection and use of technology to enhance learning. Examines software and multimedia technologies contributing to the instructional process. Prerequisites: ED 667 or ED 669.

**ED 682 Leadership in Technology (3)**

Provides guidance regarding varying aspects of technology implementation, including software/hardware acquisitions, funding, and staff development. Prerequisite: Graduate standing.

**ED 684 Multimedia in the Classroom (3)**

Multimedia gives teachers and students powerful new tools for teaching and learning by combining technologies such as video, audio, graphics, interactivity and text. Students in this course will learn how to identify, choose, plan for, produce and integrate multimedia into instruction.

**ED 685 Issues in Educational Technology (3)**

Critical exam of historical, sociological, philosophical foundations and implications of the implementation and use of technology in an educational setting.

**ED 686 Integrating Internet Into Instruction (3)**

The Internet is providing many educational opportunities for the connected classroom. This course will investigate the various components of the Internet such as the World Wide Web, telecommunications and other resources for use in the classroom. Students will learn to find, identify, evaluate and utilize Internet resources for instruction.

**ED 687 Emerging Technologies in Education (3)**

Technology is a constantly changing and ever evolving process. Many new emerging technologies hold promise for application for learning in the classroom. Students in this course will explore new technologies, evaluate them and determine their applicability for the classroom.

**ED 688 Using Technology with Special Needs Students (3)**

Using technology, including computers to enhance education of students with exceptionalities. Prerequisite: ED 300, Graduate standing, and either ED 302, or SE 476.

**ED 690 Tests and Measurements (3)**

Evaluation procedures as an integral part of the teaching/learning process. Involves identifying and defining intended learning outcomes, writing educational objectives, constructing and selecting various evaluation instruments, and interpreting and using test results to improve instruction. Emphasis on criterion and norm-referenced tests of ability and achievement as well as tests of individual assessment. May be taken for undergraduate or graduate credit.

**ED 694 Philosophy of Education (3)**

Historical and contemporary analysis of philosophical perspectives concerning the educational process. Develops and traces schools of educational thought in an effort to help students clarify their own educational philosophy. Emphasis on relationship between educational philosophy and practice. May be taken for undergraduate or graduate credit.

**ED 696 Thesis (3-6)**

Research design and analysis of action research or library research study. Culminating activity for graduate students interested in research or advanced study. Professional lab experiences in child study, innovative problems constitute the typical projects for thesis designs. Prerequisite: ED 665 and permission of Education chair.

**ED 697 Independent Study in Education (1-3)**

Independent research for graduate students investigating a special problem in a specific areas. Prerequisite: Chair consent.

**ED 698 Action Research Capstone (1-2)**

ED 698 Action Research Capstone (1-2) Students will identify a question about their own teaching or school practices, review the current research literature, develop a plan to collect data, collect and analyze their data, identify emergent themes, write an action research paper, and present their project and findings to the faculty committee. The objectives of the action research project are to help students understand the research process in an educational setting; provide students with the opportunity to study and improve their own teaching through an action research project; and to show students how research can have a positive effect on school improvement and change. Prerequisites: Admission to the graduate program, successful completion of at least 18 credit hours of course work and successful completion of ED 665 Educational Research.