

Course Descriptions

Graduate degrees are not offered in all the following areas, but courses may be taken for graduate credit. Please consult degree requirements listed previously for master's degree-granting programs.

Accounting

ACCT 551 Managerial Accounting (3).

Presentation, analysis and interpretation of accounting data for use in planning, organizing, actuating and controlling business activities. Prerequisite: Entry into the MBA program and completion of MBA common body of knowledge requirements.

ACCT 579 Individual Research (1-3).

Independent study. (May be repeated for a maximum of 3 cr.) Prerequisite: Approval of MBA coordinator required. (TBA)

ACCT 593 Topics in Accounting (1-3). As

announced. (May be repeated for a maximum of 6 cr. with consent of instructor. (TBA)

Agriculture

AG 569 Workshop in Agriculture (1-3).

As announced. (May be repeated for a maximum of 6 cr.)

Anthropology

ANTH 500 Modern Concepts in Anthropology (3).

Contemporary theoretical and methodological approaches in cultural anthropology with background on their origin and philosophical foundations.

ANTH 501 Anthropological Research Foundations (3).

Construction of anthropological research designs, hypothesis formulation, sampling, data collection, data reduction and reporting.

ANTH 504 Human Osteology (3).

Hands-on identification and analysis of human skeletal remains, with a focus on archaeological applications. Prerequisite: Consent of instructor.

ANTH 505 Basic Quantitative Methods in Anthropology (1).

Anthropological and archaeological applications of basic techniques of statistical description and inference.

ANTH 506 Advanced Quantitative Methods in Anthropology (3).

Advanced quantitative techniques in archaeology including multivariate techniques, graphical methods of data presentation and spatial analysis. Heavy emphasis on the use of microcomputer to analyze and display archaeological data. Prerequisite: ANTH 505.

ANTH 510 Internship in Applied Anthropology (3-6).

Provides hands-on experience in a non-academic setting for specific areas of interest; i.e., Cultural Resource Management. Prerequisite: Consent of instructor.

ANTH 518 Zooarchaeology (3).

Techniques for the identification of faunal remains and review of important theoretical issues in zooarchaeology. Prerequisite: Consent of instructor.

ANTH 520 Advanced Flintworking and Lithic Analysis (3).

For the experienced flintworker; advanced techniques and applying results of experimental flintworking to analysis.

ANTH 521 Laboratory Analysis in Archaeology (3).

Practical laboratory procedures in archaeology.

ANTH 522 Imaging in Anthropology (3).

Provide students with the ability to communicate data visually. Techniques explored include technical photography in the field and laboratory, artifact and specimen illustration, the design of scientific graphics, and constructing a poster for a scientific meeting.

ANTH 523 The Archaeology of Complex Societies (3).

Investigation of the archaeological signatures of socio-economic complexity worldwide, followed by the in-depth examination and evaluation of theories that explain rise of such societies.

ANTH 532 Indians of the Southwest (3).

Native American tribes of New Mexico and Arizona from the time of Spanish contact to the present.

ANTH 541 Historic Preservation (3).

Federal and state laws and regulations, procedures for managing and protecting archaeological sites and artifacts, philosophical basis of historic preservation in the United States, ethical considerations, and Federal and State regulatory administration.

ANTH 542 Cultural Resource Management Applications (3).

Federal and state contract procedures, proposal and budget preparation, preparing a memorandum of agreement, Section 106 compliance procedures, preparing cultural resource management reports, and curation administration.

ANTH 550 Recent Developments in Archaeological Theory (3). Advances in archaeological theory from the mid-1960s through present with emphasis on anthropological archaeological theories.

ANTH 560 Paleoindians in the New World (3). Investigation of archaeological evidence of Paleoindians from earliest dated materials to the Archaic periods.

ANTH 561 Archaeology of the Southwest (3). Intensive examination of prehistory of southwestern United States from the advent of horticulture to the Spanish Entrada.

ANTH 562 Archaeology of Mexico and Middle America (3). The prehistory of Mexico and Middle America.

ANTH 564 Hunter-Gatherer Archaeology of the West (3). A seminar on pre-agricultural adaptations in the western U.S. (Great Basin, Southwest, Great Plains). Typically the course will cover paleoenvironments, culture history, technology, and settlement and subsistence.

ANTH 569 Workshop in Anthropology (1-3). As announced. (May be repeated for a maximum of 3 cr.)

ANTH/BIOL/GEOL/PHYS 575 Scanning Electron Microscopy (2).

ANTH 579 Individual Research (1-3). Independent study. A. Archaeology. B. Ethnology. C. Linguistics. D. Physical Anthropology. E. Technical-Topical Anthropology. (May be repeated for a maximum of 4 cr.) Prerequisite: Approval of graduate advisory committee.

ANTH 583 Graduate Field Research (6). Supervised field experience of graduate caliber research in one or more of the major divisions of anthropology. Prerequisite: Approval of graduate advisory committee (only 3 hours applied to graduate degree).

ANTH 584 Graduate Readings in Anthropology (1-2). Independent study. A. Archaeology. B. Ethnology. C. Linguistics. D. Physical Anthropology. E. Technical-Topical Anthropology. (May be repeated for a maximum of 6 cr.) Prerequisite: Approval of graduate committee.

ANTH 585 Geoarchaeology (3). Geological theory and approach to site formation, preservation, destruction, and transformation processes.

ANTH 586 Geoarchaeological Analysis (3). Geoarchaeological analyses of site matrix; stone tool raw material analyses; landscape archaeology. Prerequisite: ANTH 585.

ANTH 593 Topics in Anthropology (1-3). As announced. (May be repeated for credit.)

ANTH 596 Graduate Seminar in Anthropology (1-3). Offered at intervals with specific topics for discussion. (May be repeated for credit.)

ANTH 597 Colloquium (1). Professional presentations of and defense of thesis prospectus. Prerequisites: Consent of instructor/advisory committee/coordinator.

ANTH 599 Master's Thesis (1-6). No more than 6 cr. in 579 and 583 may be applied toward thesis content. (ANTH 599 credit must total 6 cr. for graduate degree.) Prerequisite: Consent of graduate advisory committee.

Art

ART 569 Workshop in Art (1-3). As announced. (May be repeated for a maximum of 6 cr.)

ART 579 Individual Research (1-3). Independent study. (May be repeated for a maximum of 4 cr.) Prerequisite: Consent of instructor.

ART 593 Topics in Art (1-3). As announced. (May be repeated for credit.)

Biology

BIOL 501 Concepts in Life Sciences (3). Modern interpretation at the cellular, organism, and population levels. Designed for a master of education degree.

BIOL 504 Fisheries Management (3). Theory, methods and philosophy of fisheries management emphasizing sport fisheries and endangered species. Occasional field trips. Concurrent enrollment: BIOL 504L. (Alt F)

BIOL 504L Fisheries Management Laboratory (1). Concurrent enrollment: BIOL 504. (Alt F)

BIOL 505 Wildlife Management (3). Theory, methods and philosophy of wildlife management emphasizing game, non-game and endangered species. Occasional field trips scheduled. Concurrent enrollment in BIOL 505L. (Alt S)

- BIOL 505L Wildlife Management Laboratory (1).** Concurrent enrollment: BIOL 505. (Alt S)
- BIOL 509 Microbial Physiology (3).** Physiological, metabolic, and nutritional characteristics of microorganisms. Concurrent enrollment: BIOL 509L. (Alt F)
- BIOL 509L Microbial Physiology Laboratory (1).** Concurrent enrollment: BIOL 509. (Alt F)
- BIOL 510 Plant Systematics (3).** An introduction to the principles of classification within the plant kingdom, including methods of collection and preservation and the process of identifying unknown plant materials. Concurrent enrollment: BIOL 510L. (Alt F)
- BIOL 510L Plant Systematics Laboratory (1).** Concurrent enrollment: BIOL 510. (Alt F)
- BIOL 511 Herpetology (3).** Biology and classification of amphibians and reptiles. Occasional field trips. Concurrent enrollment: BIOL 511L. (Alt S)
- BIOL 511L Herpetology Laboratory (1).** Concurrent enrollment: BIOL 511. (Alt S)
- BIOL 513 Conservation Biology (3).** Ecological, population, and genetic factors that influence biological diversity. Topics include theoretical concepts and management of ecosystems, habitats, and endangered species. (Alt F)
- BIOL 515 Plant Physiological Ecology (3).** Life processes of plants and their responses to a changing environment, including water relations, mineral nutrition, photosynthesis, and respiration. Concurrent enrollment: BIOL 515L. (Alt S)
- BIOL 515L Plant Physiological Ecology Laboratory (1).** Concurrent enrollment: BIOL 515. (Alt S)
- BIOL 517 Biogeography (3).** The study of the temporal and spatial patterns of the distribution of organisms and the ecological and evolutionary processes responsible for those patterns. (Alt F)
- BIOL 518 Medical Entomology (3).** Roles of insects in direct causation of disease in humans and animals; roles of insects as vectors of disease organisms; epidemiology and replication cycles of vector-borne pathogens of major medical importance. (Alt S)
- BIOL 521 Principles of Immunology (3).** Host-parasite relationships and mechanisms of immunity. Concurrent enrollment: BIOL 521L. (Alt F)
- BIOL 521L Principles of Immunology Laboratory (1).** Immunochemical techniques widely used in immunology laboratories. Concurrent enrollment: BIOL 521. (Alt F)
- BIOL 522 Medical Microbiology (3).** Microorganisms involved in disease; medical microbiology identification, symptomatology, vectors, and pathology. Concurrent enrollment: BIOL 522L. (Alt S)
- BIOL 522L Medical Microbiology Laboratory (1).** Isolation, identification and characterization of medically important microorganisms. Concurrent enrollment: BIOL 522. (Alt S)
- BIOL 524 Advanced Human Physiology (3).** An in-depth look at human physiological systems with particular emphasis on current research and system pathology. Concurrent enrollment: BIOL 524L. (Alt S)
- BIOL 524L Advanced Human Physiology Laboratory (1).** Concurrent enrollment: BIOL 524. (Alt S)
- BIOL 525 Molecular Biology (3).** Nucleic acid chemistry and enzymology, and recombinant technology of prokaryotes and eukaryotes. Concurrent enrollment: BIOL 525L. (Alt S)
- BIOL 525L Molecular Biology Laboratory (1).** Experimental techniques in isolating and manipulating DNA and RNA, bacterial growth and transformation and protein expression, purification and analysis. Concurrent enrollment: BIOL 525. (Alt S)
- BIOL 527 Developmental Biology (3).** The genetic control of development in both animal and plant model systems. Genes involved in segmentation, gastrulation, neurogenesis, muscle formation, patterning and flowering. Concurrent enrollment: BIOL 527L. (Alt F)
- BIOL 527L Developmental Biology Laboratory (1).** Concurrent enrollment in BIOL 527. (Alt F)
- BIOL 528 Biotechnology (3).** Current molecular biology techniques used in research will be described, discussed, and applied to the specific need of the graduate student. (Alt S)
- BIOL 530 Limnology and Freshwater Biology (3).** Study of freshwater habitats, and the ecology, distribution and identification of common freshwater organisms of the Southwest. Concurrent enrollment: BIOL 530L. (Alt S)
- BIOL 530L Limnology and Freshwater Biology Laboratory (1).** Concurrent enrollment in BIOL 530. (Alt S)

- BIOL 531 Mammalogy (3).** Biology and classification of mammals. Occasional weekend field trips scheduled. Concurrent enrollment: BIOL 531L. (Alt F)
- BIOL 531L Mammalogy Laboratory (1).** Concurrent enrollment: BIOL 531. (Alt F)
- BIOL 533 Neurobiology (3).** An in–depth look at the function of the human nervous system including current research techniques such as model systems utilizing genetics, advanced electrophysiology, and optical imaging of neuronal function. Concurrent enrollment: BIOL 533L. (Alt S)
- BIOL 533L Neurobiology Laboratory (1).** Concurrent enrollment: BIOL 533. (Alt S)
- BIOL 536 Ichthyology (3).** Biology and classification of fishes. Occasional field trips. Concurrent enrollment: BIOL 536L. (Alt F)
- BIOL 536L Ichthyology Laboratory (1).** Concurrent enrollment: BIOL 536. (Alt F)
- BIOL 539 Teaching in Biology (1).** Methods, resources, lesson plans in teaching biology; lecture and laboratory. Designed for students interested in gaining further experience and classwork toward teaching licensure. (F)
- BIOL 542 Ornithology (3).** Biology and classification of birds. Occasional field trips scheduled. Concurrent enrollment: BIOL 542L. (Alt S)
- BIOL 542L Ornithology Laboratory (1).** Concurrent enrollment: BIOL 542. (Alt S)
- BIOL 550 Virology (3).** Characteristics, structure, identification and clinical relevance of viruses. Concurrent enrollment: BIOL 550L. (Alt S)
- BIOL 550L Virology Laboratory (1).** Techniques in classical, molecular and medical virology. Concurrent enrollment: BIOL 550. (Alt S)
- BIOL 560 Landscape Ecology and GIS (3).** An introduction to the study of large–scale ecological patterns and processes, including examination of spatial heterogeneity at the landscape level and practical use of Geographic Information Systems (GIS) to analyze and predict landscape patterns. Concurrent enrollment: BIOL 560L. (Alt S)
- BIOL 560L Landscape Ecology and GIS Laboratory (1).** Concurrent enrollment: BIOL 560. (Alt S)
- BIOL 562 Evolution (3).** Causes of micro– and macro–evolutionary change, speciation and cladogenesis, including aspects of morphology, physiology, genetics and ecology. (Alt F)
- BIOL 564 Animal Behavior (3).** Genetics, anatomical, physiological, ecological, and evolutionary aspects of animal behavior. (Alt S)
- BIOL 569 Workshop in Biology (1-3).** As announced. (May be repeated for a maximum of 4 cr.)
- BIOL/ANTH/GEOL/PHYS 575 Scanning Electron Microscopy (2).** See description under GEOL 575. (F)
- BIOL 579 Individual Research (1-3).** Independent Study. A) Bacteriology. B) Mycology. C) Vascular plants. D) Animal physiology. E) Entomology. F) Invertebrate zoology. G) Plant ecology. H) Animal ecology. I) Freshwater biology. J) Plant physiology. K) Photography for biologists. L) Ichthyology. M) Herpetology. N) Ornithology. O) Mammalogy. P) Microbial ecology. Q) Parasitology. R) Electron microscopy. S) Molecular Biology. T) Applied Ecology. (May be repeated for a maximum total of 4 cr.) Prerequisite: Consent of instructor. (F)
- BIOL 582 Biological Literature (2).** Library readings and reports; use of bibliographies, indices, and technical journals; preparation of scientific papers. (F)
- BIOL 592 Graduate Seminar (2).** Selected topics in modern biology. (May be repeated for a maximum of 4 cr.). (S)
- BIOL 593 Topics in Biology (1-3).** As announced. (May be repeated for credit.)
- BIOL 599 Master’s Thesis (1-6).** (BIOL 599 credit must total 6 cr. for graduate degree.) Prerequisite: Consent of graduate advisory committee.

Bilingual Education

- BLED 501 Bilingual Education: Theory to Practice (3).** A critical comprehensive investigation of current issues and trends affecting bilingual education. (S)
- BLED 505 Reading and the Bilingual Child (3).** Acquisition of literacy skills by students whose dominant language is other than English. (Instruction in Spanish.) (F)
- BLED/SPAN 515 Hispanic Literature and Culture (3).** This course will examine cultural aspects unique to Hispanic literature and culture. It will introduce folktales, short stories, poetry, handouts, and films on the different aspects of Hispanic literature and

culture. Class will be held in a seminar discussion. (Instruction in Spanish.)

BLED 525 The Role of the Parent in the Bilingual Classroom (3). Provides strategies for involving parents in the learning process at home and at school. (Instruction in Spanish.) (Su)

BLED 530 Language Assessment and Placement of Bilingual Students (3). Identification and development of evaluation procedures as entry/exit criteria for bilingual students. (S)

BLED 534 Content Area Instruction in Bilingual Education (3). Development of instructional strategies to be used in the teaching of the content areas. (Instruction in Spanish.)

BLED 538 Language Arts and the Teacher of English as a Second Language (3). Development of listening, speaking, reading and writing skills within a language arts program for bilingual students. (S)

BLED 569 Workshop in Bilingual Education (1-3). As announced. (Up to 3 cr. may count toward graduate degree with prior approval of graduate advisory committee.) (May be repeated for a maximum of 3 cr.)

BLED 573 Early Childhood Bilingualism (3). First and second language acquisition with reference to the young linguistically diverse child utilizing case studies and current research to include legal developments, family and school partnerships and parental rights. (Su)

BLED 578 Teaching Multicultural Heritage of the Southwest (3). Examines the historical, linguistic and cultural factors that influence the Southwest; practicing and prospective educators engage in developing units and exploring resources which focus upon contributions of various ethnic groups. (S,F)

BLED 579 Individual Research (1-3). Prerequisite: Consent of instructor. (May be repeated for a maximum of 4 cr.)

BLED 580 ESL Methods (3). An overview of theory and methods for improving the language skills of learners of English as a Second Language. (Alt S)

BLED 590 Graduate Project (1-6). A graduate project designed as a culminating exhibition of mastery of the content of the student's program.

BLED 593 Topics in Bilingual Education (1-3). As announced. (May be repeated for a maximum of 6 cr.) Prerequisite: Approval for this course by the advisory committee must be received prior to the semester taken. (F)

BLED 599 Master's Thesis (1-6). (BLED 599 credit must total 6 cr. for graduate degree.) Prerequisite: Consent of graduate advisory committee.

Business Administration

BUS 501 Business and Society (3). Relationship among individuals, business, and government institutions with emphasis on value and goal conflict. Examines social responsibility of business ethics, value systems in business, business in literature, historical concepts of business, public welfare, and social policy concepts as they affect administrators. Prerequisite: Acceptance into an ENMU graduate program.

BUS 518 Managerial Research Methods (3). A research project--based course involving the concepts, tools and techniques used in applying the scientific method in the business environment. Topics include: scientific method, research process, types of research, questionnaire design, statistical tests, analysis and presentation of results. Prerequisite: STAT 213.

BUS 531 International Business (3). Environmental, economic, political and social constraints on doing business abroad; effects of overseas business investments on domestic and foreign economies; foreign market analysis and operational strategy of a firm; management problems and development potential of international operations. Prerequisite: Completion of all MBA common body of knowledge requirements.

BUS 550 Employment Law (3). Analyzes the employer--employee relationship, employer liability, theories of discrimination, major employment legislation, cases, regulations, and management practices. The objective is to prepare managers to recognize legal issues regarding the employer--employee relationship in order to avoid potential legal liability. Prerequisites: Completion of all MBA common body of knowledge requirements for acceptance into an ENMU graduate program. (TBA)

BUS 553 Strategic Management (3). A top-management view leading to formulation of general policies for the organization; objectives, plans for achievement, organizing administrative personnel to meet objectives, implementation of programs, measurement of results, and re-appraisal of objectives, plans, and action patterns. Prerequisite: Final semester standing only.

BUS 579 Individual Research (1-3). Independent study. (May be repeated for a maximum of 3 cr.) Prerequisite: Approval of MBA coordinator required. (TBA)

BUS 582 Foundations of Management (1). A web-based course providing essential managerial concepts and their application. This course may be used to meet MBA undergraduate common body of knowledge requirements. This course may **not** be used to fulfill the 33 hours of graduate coursework required for the MBA. Prerequisite: Entry into the MBA program and approval of the MBA Graduate Coordinator. (TBA)

BUS 583 Accounting Foundations for Management (1). A web-based course providing essential accounting principles and concepts and their applications, including financial statements. This course may be used to meet MBA undergraduate common body of knowledge requirements. This course may **not** be used to fulfill the 33 hours of graduate coursework required for the MBA. Prerequisite: Entry into the MBA program and approval of the MBA Graduate Coordinator. (TBA)

BUS 585 Marketing Foundations for Management (1). A web-based course providing essential marketing concepts that are required for graduate study in Business, including marketing mix, price elasticity, and the product life cycle. This course may be used to meet MBA undergraduate common body of knowledge requirements. This course may **not** be used to fulfill the 33 hours of graduate coursework required for the MBA. Prerequisite: Entry into the MBA program and approval of the MBA Graduate Coordinator. (TBA)

BUS 586 Legal Foundations of Management (1). A web-based course providing essential legal concepts, including classification of law, legal rights, and contracts, that are essential for graduate study in

Business. This course may be used to meet MBA undergraduate common body of knowledge requirements. This course may **not** be used to fulfill the 33 hours of graduate coursework required for the MBA. Prerequisite: Entry into the MBA program and approval of the MBA Graduate Coordinator. (TBA)

BUS 587 Economic Foundations of Management (1). A web-based course providing essential economic principles and concepts and their application, including GNP, government spending, inflation, unemployment, and monetary systems, that are essential for graduate study in Business. This course may be used to meet MBA undergraduate common body of knowledge requirements. This course may **not** be used to fulfill the 33 hours of graduate coursework required for the MBA. Prerequisite: Entry into the MBA program and approval of the MBA Graduate Coordinator. (TBA)

BUS 588 Financial Foundations of Management (1). A web-based course providing essential financial principles and concepts and their application, including short-term and long-term financing, financial analysis, dividend policy, and investment decisions, that are essential for graduate study in Business. This course may be used to meet MBA undergraduate common body of knowledge requirements. This course may **not** be used to fulfill the 33 hours of graduate coursework required for the MBA. Prerequisite: Entry into the MBA program and approval of the MBA Graduate Coordinator. (TBA)

BUS 593 Topics in Business Administration (1-3). As announced. (May be repeated for a maximum of 6 cr. with consent of advisor and graduate coordinator.) Prerequisite: Consent of advisor and the graduate coordinator. (TBA)

BUS 599 Master's Thesis (1-6). (BUS 599 credit must total 6 cr. for graduate degree.) Prerequisite: Consent of graduate advisory committee. (TBA)

Chemistry

CHEM 510 Advanced Analytical Chemistry (3). Advanced theory and techniques in analytical chemistry focusing on aspects not covered in regular analytical chemistry courses including: flow injection analysis (FIA), solution equilibria in the presence of interacting species, and low signal-to-noise techniques. Prerequisite: Consent of instructor. (S)

CHEM 511 Physical Chemistry/Thermodynamics (3). Thermodynamics and an introduction to statistical mechanics and kinetics, applications to atomic and molecular systems. Prerequisite: Consent of Instructor. (S)

CHEM 512 Physical Chemistry/Quantum Mechanics (3). An introduction to quantum mechanics and spectroscopy with applications to atomic and molecular systems. Prerequisite: Consent of Instructor. (S)

CHEM 513 Advanced Physical Chemistry (3). Advanced concepts in physical chemistry focusing on the structure and dynamics of chemical systems. Prerequisite: One year of undergraduate physical chemistry. (Alt F)

CHEM 522 Advanced Inorganic Chemistry (3). Physical chemical principles applicable to inorganic systems. Prerequisite: Consent of instructor.

CHEM 525 Materials Chemistry (3). An introduction to advanced materials chemistry including bioorganic materials, nanocomposites, shape memory wires, ceramics, zeolites, semiconductors, superconductors, aerogels, non-linear optical materials, liquid crystals, and fullerenes. (Alt S)

CHEM 539 Teaching in Chemistry (1). Methods, resources, lesson plans in teaching chemistry; lecture and laboratory work.

CHEM 541 Physical Organic Chemistry (3). Electronic structure of organic molecules, effect of structure on reactivity, reaction mechanisms and methods to determine them, different types of reactions. Prerequisite: Consent of instructor.

CHEM 542 Advanced Organic Chemistry (3). Survey of reactions and techniques of modern organic syntheses (pharmaceuticals and natural products), including methods of characterization and use of the chemical literature. (Alt S)

CHEM 545 Polymer Chemistry (3). Exposition of the chemical and physical properties of polymers together with methods of preparation and characterization of polymeric materials.

CHEM 550 Instrumental Analysis (4). Survey of advanced analytical techniques and analytical method development, focusing on hands-on training with modern instruments in spectroscopy, separation, and electroanalytical techniques. Prerequisites: Consent of the instructor. (F)

CHEM 552 Biochemistry (3). The chemistry of biomolecules, enzyme catalysis, metabolism and molecular genetics. Prerequisite: Consent of instructor.

CHEM 553 Advanced Biochemistry (3). A study of metabolic pathways, including biosynthesis and degradation of cellular components, biosynthesis of

secondary metabolites, and degradation of xenobiotic materials. Prerequisites: CHEM 452/552 or equivalent or consent of instructor. (S)

CHEM 555 Enzymes (3). A detailed study of the structure, mode of action, and kinetics of enzymes. Prerequisite: CHEM 452/552 or equivalent or consent of the instructor. (Alt F)

CHEM 557 Bioenergetics (3). A detailed study of the structure, mode of action, and energetics of the energy producing pathways of prokaryotic and eukaryotic cells. (Alt F)

CHEM 569 Workshop in Chemistry (1-3). As announced. (May be repeated for a maximum of 6 cr.)

CHEM 579 Individual Research (1-3). Independent study. Report required. (May be repeated for a maximum of 4 cr.) Prerequisite: Consent of instructor.

CHEM 591 Graduate Seminar (1). Selected topics presented by students; techniques in development and presentation of topics. Students are required to attend other seminars, including those presented by outside speakers. (May be repeated for a maximum of 2 cr.) Prerequisite: Consent of instructor.

CHEM 593 Topics in Chemistry (1-3). Graduate topics in analytical, inorganic, organic, physical or biological chemistry. Offered on demand; titles of topics will be announced. (May be repeated for credit with consent of chemistry graduate advisory committee.)

CHEM 599 Master's Thesis (1-6). (CHEM 599 credit must total 6 cr. for graduate degree.) Prerequisite: Consent of graduate advisory committee.

Communication

COMM 501 Communication Studies (3). Introduction to the research process, planning, sources, style and reporting. Identification of the problem and literature reviews will be emphasized. (F)

COMM 502 Communication Research Foundation (3). Methodology of qualitative and quantitative communication research, with an emphasis on design, sampling, data collection and interpretation of statistical analysis in communication research. Prerequisite: COMM 501. (S)

COMM 503 Computer Assisted Journalism (3). A systematic approach to investigative reporting using computer and internet technologies. Emphasis is on in-depth reporting. Will include web publishing.

COMM 504 Small Group Process: Theory and Research (3). Communicative behavior as a function of group dynamics; theoretical and empirical communicative behavior variables in problem solving, encounter, and therapeutic groups.

COMM 508 Seminar in Rhetoric (3). Rhetorical theory from Aristotle, Cicero and Quintilian to modern rhetorical principles; the relationship of classical rhetoric to that of modern theories of communication.

COMM 512 Philosophical Foundations of Media (3). The dynamic relationship of the press to society as framed by mass communication theory and leading intellectual thought. Course will focus on the rights and responsibilities of the mass media. Topics include newsworthiness and objectivity, the right of free speech and press, power of the press, press responsibility and the role of today's media in a democracy.

COMM 513 Media Criticism (3). Examination of contemporary perspectives and theoretical approaches to media criticism.

COMM 515 Ethics of Public Communication (3). Ethical theory will be examined as it relates to the practice of public communication. Students will focus on major philosophical systems and current ethical issues in the discipline.

COMM 522 Directing for Television (3). Advanced planning and production of television programs with emphasis on direction, with practical experience in directing various types of television programs. Concurrent enrollment: COMM 522L.

COMM 522L Directing for Television Laboratory (NC). Advanced directing techniques for both studio and electronic field production. Concurrent enrollment: COMM 522.

COMM 528 Media Management (3). Study of management processes of media entities. Special attention given to personnel relationships, programming, advertising, community relations, economic and legal problems. Case study emphasized.

COMM 545 Communication Theory (3). Processes of communicative behavior and supportive research. The nature of information processing by humans includes perceptual processes, symbolization processes, message orientation, and the channels for display of self in interpersonal, public and mass communication settings.

COMM 547 Organizational Communication (3). Basic concepts related to communication in organizations; management philosophy translated into communicative behavior or interpersonal, group, and public nature; effective communication in organizations and approaches to solving organizational communication problems using a systems perspective.

COMM 555 Intercultural Communication (3). Interaction process among and across cultures; how culture is influenced by the language and how language through its cultural dimensions influences communication behavior; stereotype effect on the self-image, communicative styles and nonverbal behaviors.

COMM 560 Public Relations Cases and Campaigns (3). Selected public relations case studies and a directed public relations campaign project with local and/or regional client organization.

COMM 569 Workshop in Communication (3). As announced. (May be repeated for a maximum of 6 cr.)

COMM 570 Interpersonal Communicative Behavior (3). The function of communication in the process of developing and maintaining an individual self-image, relationships, and roles in groups and society; transactional states in relationships, gaming strategies, emotional and social isolation, communicative behaviors among and with youth and elderly.

COMM 575 Gender Communication (3). Explores variations in communicative behavior related to biological sex and psychological gender. Examines male and female communication issues in relationships, organizations, and the media.

COMM 577 Communication in the Family (3). Examines the theory and research exploring the family process and communication in a variety of family types.

COMM 579 Individual Research (1-3). Independent study. (May be repeated for a maximum of 4 cr.) Prerequisite: Consent of instructor.

COMM 585 Special Project (1-3). Guided study in a specific area of Communication. Extensive research and writing is expected. Last semester of enrollment.

COMM 591 Graduate Seminar (1-3). (May be repeated for maximum of 4 cr.)

COMM 593 Topics in Communication (1-3).

As announced. (May be repeated for credit.)

COMM 599 Master's Thesis (1-6). (COMM 599 credit must total 6 cr. for graduate degree.) Prerequisite: Consent of graduate advisory committee.

Communicative Disorders**CDIS 500 Research Methods in Communicative Disorders (3).**

An introduction to research methodology in Communicative Disorders and basic experimental design. Focus is on the major types of descriptive and experimental research in speech–language pathology and the application of statistical reasoning. (S)

CDIS 501 Beginning Practicum in Speech–Language Pathology (1).

Supervised clinical experience including evaluating patients, administering speech/language therapy, holding parent conferences, and maintaining records. Practicum experiences will be obtained at the ENMU Clinic or at sites that are directly supervised by ENMU CDIS faculty. Attendance at a one–hour clinicians' meeting each week is required. Students must earn a grade of “B” or better in order to count clock hours obtained for ASHA requirements. (May be repeated for credit.) Prerequisite: Admission to the graduate program. (F, S)

CDIS 502 Intermediate Practicum in Speech–Language Pathology (1).

Supervised clinical experience including evaluating patients, administering speech/language therapy, holding parent conferences, and maintaining records. Practicum experiences will be obtained at the ENMU Clinic, at sites that are directly supervised by ENMU CDIS faculty or at off–campus sites that accept intermediate–level student clinicians. Students must earn a grade of “B” or better in order to count clock hours obtained for ASHA requirements. (May be repeated for credit.) Prerequisite: Successful completion of CDIS 501 and appropriate skill level on the KASA. (F, S)

CDIS 503 Advanced Practicum in Speech–Language Pathology (1).

Supervised clinical experience including evaluating patients, administering speech/language therapy, holding parent conferences, and maintaining records. Practicum experiences

will be obtained at the ENMU Clinic, at sites that are directly supervised by ENMU CDIS faculty, or at off–campus sites that accept intermediate– or advanced–level student clinicians. Students must earn a grade of “B” or better in order to count clock hours obtained for ASHA requirements. (May be repeated for credit.) Prerequisite: Successful completion of CDIS 502 and appropriate skill level on the KASA. (F, S)

CDIS 506 Professional Issues in Communicative Disorders (1).

Issues related to the field of speech–language pathology including ethical issues and considerations and relevant federal and state law. Issues of credentials, including certification, licensure and specialty recognition are also reviewed. (F)

CDIS 511 Articulation/Phonological Disorders (2).

Current concepts and special considerations in studying and managing articulation/phonological disorders. (F)

CDIS 512 Voice Disorders (3).

Current concepts and special considerations in studying and managing voice disorders including alaryngeal speech. (Alt S)

CDIS 516 Language Disorders I (2).

Evaluation and intervention for children and adolescents having language disorders based on language samples and other informal assessment procedures.

CDIS 517 Language Disorders II (2).

Evaluation and intervention for children and adolescents having language disorders based on standardized and other formal assessment procedures.

CDIS 522 Language Disorders (3).

Current concepts and special considerations in studying and managing language disorders with emphasis on children and adolescents. (S)

CDIS 523 Practicum in Speech–Language Pathology (1-4).

Supervised clinical experience, evaluating patients, holding parent conferences, administering speech–language therapy, and maintaining records. Attendance at a one–hour clinicians' meeting each week is required. Students must earn a grade of “B” or better in order to count clock hours obtained for ASHA requirements. (May be repeated for credit.) Prerequisite: Admission to the graduate program.

- CDIS 525 Fluency Disorders (2).** Current concepts and special considerations in studying and managing fluency disorders including stuttering and other related disorders. (S)
- CDIS 526 Neurogenic Speech Disorders (3).** Current concepts and special considerations in studying and managing speech disorders related to neurological deficits. (F)
- CDIS 527 Craniofacial Anomalies (2).** Evaluation, pathomorphology, remedial management, and clinical procedures with persons presenting orofacial clefts and other related disorders. (F)
- CDIS 528 Dysphagia (2).** Current concepts and special considerations in studying normal swallowing and in understanding, diagnosing, and treating swallowing disorders in adults. (F)
- CDIS 529 Neurogenic Language Disorders (3).** Current concepts and special considerations in studying and managing language disorders related to neurological deficits. (S)
- CDIS 530 Aphasia and Related Disorders (2).** Characteristics, causes, assessment, and treatment of individuals with aphasia and related disorders, including right hemisphere damage and dementia. (F)
- CDIS 531 Advanced Audiology (3).** Advanced concepts in pathologies of the peripheral and central auditory system. Behavioral and physiologic evaluation procedures with emphasis on screening of auditory function. Considerations in the management of the hearing-impaired.
- CDIS 532 Language Disorders Following Traumatic Brain Injury (2).** Characteristics, mechanisms of injury and considerations for assessment and treatment of individuals following traumatic brain injury. (S)
- CDIS 533 Medical Aspects of Communicative Disorders (3).** Selected topics in medicine and health care that are important for the speech-language pathologist and audiologist. (S)
- CDIS 535 Practicum in Audiology (1-4).** Supervised experience in the administration of routine tests and the screening of auditory function, maintenance of clinic equipment and records, and the management and counseling of hearing impaired clients. (May be repeated for credit.) Prerequisite: Admission to graduate program.
- CDIS 540 Oral Motor Disorders (2).** Characteristics, causes, assessment, observation, and treatment of oral motor disorders in children with emphasis on swallowing and feeding disorders. Sensory integration/motor development, adaptive positioning, and specialized feeding equipment is also reviewed. (F)
- CDIS 550 Augmentative and Alternative Communication (2).** Current concepts, special considerations and therapeutic strategies for facilitating communication in physically/cognitively disabled and non-speaking individuals. (S)
- CDIS 554 Current Trends in Communicative Disorder (1).** Examination of current trends in the field of speech-language pathology, including technological developments, legal issues and policy changes. (S)
- CDIS 565 Special Project (3).** Guided study in a specific area of communicative disorders. Extensive research and writing is expected. Prerequisite: CDIS 500 and consent of instructor.
- CDIS 569 Workshop in Communicative Disorders (1-3).** As announced. (May be repeated for a maximum of 6 cr.)
- CDIS 579 Individual Research (1-3).** Independent study. (May be repeated for a maximum of 4 cr. in either area.) A) Audiology B) Speech-Language Pathology. Prerequisite: Consent of instructor.
- CDIS 589 Internship in Speech-Language Pathology (6).** Supervised clinical experience in evaluation and therapy at a cooperating institution, with selected study in pertinent areas. Prerequisite: Consent of CDIS faculty, regular status, proof of professional liability insurance, current TB test and vaccinations as required by site.
- CDIS 593 Topics in Communicative Disorders (1-3).** As announced. (May be repeated for credit.)
- CDIS 599 Master's Thesis (1-6).** (CDIS 599 credit must total 6 cr. for graduate degree.) Prerequisite: Consent of graduate advisory committee.

Computer Information Systems

CIS 500 Management Information Systems (3). The Manager's role in system selection/procurement, system implementation, policy development, and use of information in business. Prerequisite: Entry into the MBA program and completion of MBA common body of knowledge requirements. (TBA)

CIS 579 Individual Research (1-3). Independent study. (May be repeated for a maximum of 3 cr.) Prerequisite: Approval of MBA coordinator required. (TBA)

CIS 593 Topics in Computer Information Systems (1-3). As announced. (May be repeated for a maximum of 6 cr. with consent of advisor and graduate coordinator.) (TBA)

Computer Science

CS 504 Automata, Languages, and Computability (3). Basic concepts from finite automata, context free languages, Turing machines and computability. Prerequisite: Consent of instructor.

CS 551 Design and Analysis of Algorithms (3). Techniques for analyzing performance of algorithms; principles and concepts of algorithm design. Prerequisites: Consent of instructor. (S)

CS 557 Database Theory (3). Theory of databases, including physical organization, conceptual design, relational database theory and SQL. Prerequisite: Consent of instructor.

CS 561 Operating Systems (3). Theory of operating systems. Topics include processes, file systems, memory management and I/O. Prerequisite: Consent of instructor.

CS 562 Computer Networks (3). Structure, implementation, theoretical underpinnings, and applications of computer networking. Topics may include network structures and architecture, protocols, error handling, security, routing, compression. Prerequisite: Consent of instructor.

CS 569 Workshop in Computer Science (1-3). As announced. (May be repeated for a maximum of 6 cr.)

CS 570 Compiler Design (3). Theory and practice of compiler design. Scanning, grammars, parsing, semantics, intermediate representations, code generation. Prerequisite: Consent of instructor.

CS 579 Individual Research (1-3). Independent study. (May be repeated for a maximum of 4 cr.) Prerequisite: Consent of instructor.

CS 593 Topics in Computer Science (1-3). As announced. (May be repeated for credit.)

Counseling

COUN 500 School Counseling for Non-majors (3). Orients educators to the developmental comprehensive school counseling program. Consultation, partnering, and teaming with school counselors is emphasized. This course will not count toward a degree in counseling.

COUN 501 Professional Orientation in Counseling (3). Designed to introduce the student to the following aspects of the counseling profession: history, professional roles, functions, and relationships with other human service providers; standards for competent practice, professional organizations, primarily ACA and its divisions; professional certification, licensure, and accreditation practices and standards. The course will include an overview of theory, practice, methods and basic principles used by counselors in various settings.

COUN 502 Abnormal Psychology for Counselors (3). Designed to give counselors an understanding of maladaptive behavior patterns. Etiology, diagnosis and treatment of emotional disturbances are emphasized. Students will also become familiar with the relevant diagnostic manual. Prerequisite: COUN 501.

COUN 510 Foundations and Contextual Dimensions of School Counseling (3). Provides foundational knowledge and skills for the practice of school counseling. Counseling program development, implementation and evaluation will be provided using the ASCA National Model: A Framework for School Counseling Programs. Additional topics include: historical background, the role, function and responsibilities of school counselors, ethical and

legal consideration, program management skills, and collaboration, consultation, coordination and counseling skills. Emphasis will be placed on local, state and national counselor competencies and standards. Prerequisite: COUN501

COUN 525 Mental Health Ethics, Law and Practice (3). Professional, ethical and legal issues that affect the practice of counseling will be introduced. Ethical decision-making, understanding and applying ethical codes and laws will be emphasized and practiced. Prerequisite COUN 501 and permission of instructor.

COUN/EDF 530 Assessment (3). Assessment procedures and interpretation of basic measurement, grading and scoring; development of test writing skills leading to program development for teachers at all levels.

COUN 533/EDF 500 Research Seminar/ Methods of Documentary Research (3). The fundamentals of research design are reviewed. Analysis of published research relevant to counseling is emphasized, particularly research exploring treatment modalities. Prerequisite: COUN 501.

COUN 542 Career and Lifestyle Development (3). Examines major career and life-style developmental theories. Practice in the use of instruments and activities that assess career interest, aptitude, feasibility and decision-making is stressed. Prerequisites: COUN 501

COUN 544 Theories of Counseling (3). Provides students with an overview of basic theoretical approaches to counseling. The historical, philosophical, societal, cultural, economic, and political dimensions of counseling theory are included, as well as current trends in counseling; roles, functions and professional identity of counselors; ethical and legal issues related to the practice of counseling. Prerequisites: COUN 501, 530, 555.

COUN 545 Family Counseling (3). Provides an understanding of family systems theory and major models of family interaction. Common family counseling scenarios are simulated and prominent therapeutic interaction skills are practiced. Prerequisite: COUN 501, 544

COUN 547 Group Counseling (3). Group dynamics are examined from a theoretical and experiential perspective. This course emphasizes the practice of basic interaction skills, particularly those skills that are indicative of therapeutic group facilitation, or leadership. Each student participates in a group counseling experience. Prerequisite: COUN 501, 544, 549.

COUN 549 Facilitation and Intervention Techniques for Counselors (3). Essential interviewing and counseling skills necessary to develop a therapeutic relationship are taught and practiced throughout the course. Skills include core counseling skills, intentional interviewing, intervention strategies, counseling techniques and stages of effective counseling. Counselor characteristics that influence the helping process will be examined. Prerequisite: COUN 501, 544

COUN 555 Human Growth and Development (3). Reviews the span of human psychological growth as it is influenced by developmental predisposing needs. Students will explore their own preconceptions relevant to adaptive human growth, and they will synthesize interventions useful in counseling circumstances. Prerequisite: COUN 501.

COUN 556 Cross-Cultural Counseling (3). Cultural and social issues that may influence the counseling experience are emphasized. Students will practice skills designed to increase counselor awareness, sensitivity and responsiveness to cultural difference. Prerequisite: COUN 501, 544

COUN 575 Counseling Assessment (3). Provides students with an understanding of the techniques and instruments most often used for assessment in counseling. Basic statistical and measurement concepts are reviewed, such as reliability; validity, central tendency, variability, correlations, frequency distributions, norm and criterion referenced assessment, and standardized and non-standardized testing. Ethical, legal and multicultural dimensions of assessment are overviewed, including strategies for selecting, administering, and interpreting instruments. Emphasis is placed on clinical and environmental evaluation. Prerequisites: COUN 501 and EDF 530.

COUN 578 Case Management (3). Offers the student specific principles and models of case conceptualization for initiating, maintaining and terminating counseling sessions, including: conducting an intake interview, biopsychosocial assessment, crisis intervention, treatment planning, and caseload management. Ethical and legal considerations are overviewed, including: diversity issues, clinical supervision, managed care practices, and expert witness status. Prerequisite COUN 501, 502, 549.

COUN 579 Individual Research (1-3). Independent Study. Prerequisite: Permission from the Counseling Programs Coordinator. (May be repeated for a maximum of 3 cr.)

COUN 580 Counseling Children and Adolescents (3). Provides a conceptual framework for developmentally appropriate counseling interventions for children, adolescents and their families. Ethical and legal considerations that involve counseling minors are examined. Prerequisite: COUN 501, 544, 549.

COUN 593 Topics in Counseling (1-3). As Announced.

COUN 597 Practicum in Counseling (3). Supervised counseling experience working directly with clients in a planned, recorded and evaluated setting. Prerequisite: Successful completion of coursework and/or permission of Counseling Program Coordinator.

COUN 598 Internship/Seminar (3-12). Students perform counseling in schools or mental health agencies under the supervision of faculty and approved site supervisor(s). Students must attend weekly on-campus seminars. Prerequisite: Successful completion of required courses for the Master of Arts in Counseling or the Master of Education in School Counseling; successful completion of the CPCE and permission from the Counseling Programs Coordinator.

Curriculum and Instruction

CI 521 Teacher as Researcher (3). Teacher research as systematic, intentional inquiry into one's own teaching practice which includes the framing of research questions and development of the necessary tools for collection and analysis of data. (F)

CI 531 Critical Pedagogy and Educational Reform (3). Students analyze and critique hegemonic practices in education. Marginalization, alienation, violence, poverty and "othering" will be examined as structural mechanisms designed to selectively empower and oppress students in educational settings. (S)

CI 540 Instructional Leadership (3). Educational leaders contribute to students' success through informed decision-making and practice. This course focuses on developed and emerging curricular and instructional practices that contribute to student achievement. (F)

CI 591 Seminar in Curriculum, Instruction, and Assessment (3). An in-depth examination of interrelated issues that involve curriculum, instruction, and assessment. Emphasis on alternative assessment strategies, interpretation of assessment data, and data-driven changes in curriculum and instruction. (S)

Economics

ECON 525 Managerial Economics (3). Application of economic theory to problems of business management; profit, demand, cost competition, employment of factors of production and capital budgeting. Prerequisite: Entry into the MBA program and completion of MBA common body of knowledge requirements.

ECON 579 Individual Research (1-3). Independent study. (May be repeated for a maximum of 3 cr.) Prerequisite: Approval of MBA coordinator required. (TBA)

ECON 593 Topics in Economics (1-3). As announced. (May be repeated for a maximum of 6 cr. with consent of advisor and the graduate coordinator.) Prerequisite: Consent of advisor and the graduate coordinator. (TBA)

Education Administration

EDAD 525 Personnel (3). Present strategies for staff recruitment, pre-service training and staff development.

EDAD 526 Leadership (3). Examination of current literature and major writers relative to theories of leadership. All students will develop a personal set of goals for the development of their own "leadership style."

EDAD 535 Systems Communication (3).

Identification of systems of interest (including community, parents, students, teachers, administrators and the media) and developing communications that promote involvement, interest, ownership, and commitment.

EDAD 560 Policy Analysis (3). A study of the legal, legislative and fiscal requirements that must be incorporated into the governance of a school system. The process of critical analysis and citizen involvement in a democracy will be applied.

EDAD 569 Workshop in Education Administration (1-3). As announced. Only workshops in administration area of education are acceptable for credit on administrative certificate. (Up to 3 cr. may count toward graduate degree with prior approval of graduate advisory committee.)

EDAD 579 Individual Research (1-3).

Prerequisite: Consent of instructor. Approval for this course must be received prior to the semester taken.

EDAD 582 School Administration (3).

General school administrative responsibilities in a culturally diversified society with special emphasis on the development of budgets that fulfill state and federal requirements at the program, building and district levels. (F)

EDAD 583 Applied Research in Education Administration (1-3).

Practical treatment of contemporary problems in education administration. Group or individual studies. Only studies in administration are applicable for credit in administration. (May be repeated for a maximum of 6 cr.) Prerequisite: Consent of instructor. Approval for this course must be received prior to the semester taken.

EDAD 590 Graduate Project (1-6).

A graduate project designed as a culminating exhibition of mastery of the content of the student's program.

EDAD 591 Graduate Seminar in Education Administration (2).

Only seminars in administration are applicable for credit in administration. (May be repeated for a maximum of 6 cr.) Prerequisite: Consent of instructor.

EDAD 593 Topics in Education Administration (1-3).

As announced. (May be repeated for a maximum of 6 cr.)

EDAD 597 Internship I (3).

Experience working in a public school setting under supervision of a public school administrator. The internship must include a minimum of 120 clock hours in the fall semester. Prerequisite: Consent of graduate advisor and coordinator of administrative internships. (See Internship Manual for requirements)

EDAD 598 Internship II (3).

Experience working in a public school administration setting under supervision of a public school administrator. The internship must include a minimum of 120 clock hours in the spring semester. Prerequisite: Consent of graduate advisor and coordinator of administrative internship. (See Internship Manual for requirements)

EDAD 599 Master's Thesis (1-6).

(EDAD 599 credit must total 6 cr. for graduate degree.) Prerequisite: Consent of graduate advisory committee.

Education Foundations

EDF 500/COUN 533 Methods of Documentary Research/Research Seminar (3).

Introduction to educational research including historical, descriptive and experimental designs. Students will be required to design and write a research report on some aspect of educational thought or practice.

EDF 501 Curriculum: Theory into Practice(3).

Theory and principles of curriculum development in the public school.

EDF 515 Theories of Learning and Motivation (3).

A comparison of behavioristic, cognitive, gestalt and constructivist theories; motivational techniques; their applications to classroom learning.

EDF/COUN 530 Assessment (3).

Assessment procedures and interpretation of basic measurement, grading and scoring; development of test writing skills leading to program development for teachers at all levels.

EDF/SOC 535 Sociology of Education (3).**EDF 537 History of Educational Thought (3).**

Origin and development of the educational system from ancient to modern times as conditioned by social, political, religious, cultural, and economic changes.

EDF 538 Instructional Design (3).

Theory and application of instructional design process in various educational settings. Emphasis on designing quality instruction to maximize student academic learning.

EDF 569 Workshop in Education Foundations (1-3). As announced. (Up to 3 cr. may count toward graduate degree with prior approval of graduate advisory committee.) Prerequisite: Consent of instructor.

EDF 579 Individual Research (1-3). Independent study in education foundations. (May be repeated for a maximum of 4 cr.) Prerequisite: Consent of instructor.

EDF 583 Field Studies in Education Foundations (1-3). (May be repeated for a maximum of 6 cr. with permission of instructor.) Prerequisite: Consent of instructor. Approval for this course must be received prior to the semester taken.

EDF 590 Graduate Project (1-6). A graduate project designed as a culminating exhibition of mastery of the content of the student's program.

EDF 591 Graduate Seminar in Education Foundations (1-3). Problems in education foundations. (May be repeated for a maximum of 4 cr.) Prerequisite: Permission of graduate advisory committee.

EDF 593 Topics in Education Foundations (1-3). As announced. (May be repeated for a maximum of 6 cr.)

EDF 599 Master's Thesis (1-6). (EDF 599 credit must total 6 cr. for graduate degree.) Prerequisite: Consent of graduate advisory committee.

Elementary Education

ELED/ENG/RED/SED 507 Teaching Writing (6). Participants explore a number of research-based approaches to the teaching of writing. Participants present successful teaching strategies in the area of writing across the curriculum and write extensively. Prerequisites: Admission by application only. Application deadline is April 1. (Su)

ELED 511 Trends in Science and Mathematics Education (3). Examination of cognitive theories for understanding of science and mathematics. In-depth look at trends including literacy, problem-solving, inquiry, discovery and technology applications in the modern elementary classroom. (Su)

ELED/RED 520 Multiple Literacies (3). In-depth study of the multiple literacies that learners and readers encounter today, including linguistic and nonlinguistic texts. Within this context, the courses will examine the impact of technology, multiple sign

systems, semiotics and various genres including multicultural children's literature on reading and learning in current classrooms. Prerequisite: RED 517. (Alt F)

ELED 523 Induction to Teaching (4). Supervised classroom teaching experiences designed to put theory in practice and increase teaching skills. Prerequisites: BLED 578, RED 587. Consent of Field Placement Coordinator. Hours may be applied toward Master's degree with emphasis in Bilingual, Elementary, English as a Second Language or Reading/Literacy education. (F, S)

ELED/SED 532 Technology Integrated Curriculum (3). The focus for this course is to support educators in designing lessons and courses that focus on developing and deepening student understanding while incorporating technology resources. (Su)

ELED/SED 535 The Technology Rich Environment (3). This course is designed to implement units supported by technology, within a classroom setting, perform action research using advanced curriculum design and enhance technology skills within a K-12 classroom. Prerequisite: ELED 532. (F)

ELED/SED 537 Technology Leadership (3). This course is designed to support educators as they transition into becoming an instructional technology leader within their school and district. Prerequisites: ELED 532 and 535. (S)

ELED/SED 540 Creativity Across the Curriculum (3). A study of the theoretical and practical aspects of creativity. Introduction to major definitions, theories and research, techniques for teaching, adapting curriculum, instruments, enhancing personal creativity and encouraging creativity in children.

ELED/FCS 565 Child Guidance (3). The teacher in guidance; parent-teacher relationships; interagency cooperation. Those who have previously taken FCS 465 may not enroll in FCS 565. Concurrent enrollment: FCS 565L. Prerequisite: Consent of instructor. (S)

ELED/FCS 565L Child Guidance Laboratory (1). Supervises observation and teaching of young children in the Child Development Center. Includes planning and implementing experiences with young children. Those who have previously taken FCS 465 may not enroll in FCS 565. Concurrent enrollment: FCS 565. Prerequisite: Consent of instructor.

ELED 569 Workshop in Elementary Education (1-3). As announced. (Up to 3 cr. may count toward graduate degree with prior approval of graduate advisory committee.)

ELED 579 Individual Research in Elementary Education (1-3). Independent study. (May be repeated for a maximum of 4 cr.) Prerequisite: Consent of instructor.

ELED/RED 581 Advanced Studies and Instructional Applications in Language Arts (3). A comprehensive study, based on principles of child growth and development and latest research in best practices of the language arts for the elementary and middle school. Major areas of consideration are trends, materials and techniques, and the integration of curriculum including the fine arts. The inter-relationships of the communicative arts are given primary emphasis. Prerequisite: RED 517. (S)

ELED/FCS 582 Methods of Early Childhood Education (4). Developmental appropriate curriculum, material and methods for the early childhood classroom. Those who have taken FCS 482 may not register for FCS/ELED 582. Prerequisite: EDF 501 or 538. (F)

ELED/FCS 584 Practicum in Early Childhood Education (6). Placement in an early childhood program. Supervised observation, planning, teaching, evaluation of learners, and working with parents of young children. Prerequisite: FCS/ELED 565/565L or 482. (F, S, Su)

ELED 590 Graduate Project (1-6). A graduate project designed as a culminating exhibition of mastery of the content of the student's program.

ELED 591 Graduate Seminar in Elementary Education (1-3). Selection and study of a problem in the elementary school. A research report is required. Prerequisite: Permission of graduate advisory committee.

ELED 593 Topics in Elementary Education (1-3). As announced. (May be repeated with permission of advisor.)

ELED 599 Master's Thesis (1-6). (ELED 599 credit must total 6 cr. for graduate degree.) Prerequisite: Consent of graduate advisory committee.

English

ENG 500 Literary Theory (3). Introduction to some of the theoretical and philosophical texts and literary movements that inform and influence the reading of literature. Prerequisite: Graduate standing. Required for all graduate students in English. (Alt F)

ENG 501 Pedagogy of College Writing (3). Practical and theoretical approaches to the teaching of writing on the college level. Prerequisite: Graduate standing. Required for all graduate teaching assistants in English.

ENG 502 Bibliography and Methods (3). Introduction to the research tools and methodology of literary scholarship. Prerequisite: Graduate standing. Course required for all graduate students in English. (Alt F)

ENG/ELED/RED/SED 507 Teaching Writing (6). Offered in conjunction with the High Plains Writing Project. Prerequisite: Admission by application only. Application deadline is April 1.

ENG 526 American Authors/Genres/Themes (3). Selected authors, literary forms, or unifying cultural or ideological concepts as represented in American literature. See schedule for specific course content. May be repeated for credit. Prerequisite: Graduate standing.

ENG 530 British Authors/Genres/Themes (3). Selected authors, literary forms, or unifying cultural or ideological concepts as represented in British literature. See schedule for specific course content. May be repeated for credit. Prerequisite: Graduate standing.

ENG 539 World Authors/Genres/Themes (3). Selected authors, literary forms, or unifying cultural or ideological concepts as represented in World literature. See schedule for specific course content. May be repeated for credit. Prerequisite: Graduate standing.

ENG 545 English Language Studies (3). Intensive study designed to enhance student's knowledge of linguistic structure and/or English language history. See schedule for specific course content. May be repeated for credit. Prerequisite: Graduate standing.

ENG 547 Literary and Cultural Studies (3). Organizing principles, ideologies or symbols in relation to specific cultural contexts. Not limited to literary texts. See schedule for specific course content. May be repeated for credit. Prerequisite: Graduate standing.

ENG 560 Seminar: Literature before 1800

(3). Topics to be announced. May be repeated for credit because topic varies. Prerequisite: Graduate standing. Required for all graduate students in English. (Alt S)

ENG 569 Workshop in English (1-3). As announced. (May be repeated for a maximum of 6 credit hours) Prerequisite: Graduate standing.

ENG 579 Individual Research (1-3). Independent study. (May be repeated for a maximum of 4 cr.) Prerequisite: Graduate standing and consent of instructor.

ENG 590 Seminar: Literature after 1800 (3). Topics to be announced. May be repeated for credit because topic varies. Prerequisite: Graduate standing. Required for all graduate students in English. (Alt S)

ENG 593 Topics in English (1-3). As announced. (May be repeated for credit.) Prerequisite: Graduate standing.

ENG 596 Methods of Teaching Secondary English (3). Materials, methods and procedures for improvement of instruction in composition: addresses specific problems connected with teaching mechanics, language structure, organization, and the interpretation and appreciation of literature. Prerequisite: Graduate standing.

ENG 599 Master's Thesis (1-6). Must total 6 credit hours for graduate degree. Prerequisite: Graduate standing and consent of graduate advisory committee.

Family and Consumer Sciences

FCS 513 Families at Risk (3). Family stress and effective coping mechanisms that relate to normative transitions and crisis events. Effective parenting strategies.

FCS/SOC 515 Problems in the Family (3). Marital difficulties and tensions; application in the field.

FCS 520 Strategic FCS Program Management (3). Philosophy and development of FCS middle and secondary school programs based on state and national standards. Use of FCCLA in the classroom. Preparation of students for world of work. Computer applications.

FCS 560 Adolescent Identity and Relationships (3). Social, psychological, cultural influences and demands on the adolescent, particularly in relation to clothing,

appearance, language and diet. Development of the self and interpersonal relationships. Prerequisites: Social Psychological Aspects of Dress, Adolescent Psychology, Social Psychology, or an equivalent course.

FCS/ELED 565 Child Guidance (3). The teacher in guidance; parent–teacher relationships; interagency cooperation. Those who have previously taken FCS 465 may not enroll in FCS 565. Concurrent enrollment: FCS 565L. Prerequisites: Consent of instructor. (S)

FCS/ELED 565L Child Guidance Laboratory (1). Supervised observation and teaching of young children in the Child Development Center. Includes planning and implementing experiences with young children. Those who have previously taken FCS 465 may not enroll in FCS 565. Concurrent enrollment: FCS 565. Prerequisites: Consent of instructor. (S)

FCS 569 Workshop in Family and Consumer Sciences (1-3). As announced. (Up to 3 cr. may count toward graduate degree with prior approval of graduate advisory committee.)

FCS 571 Nutritional Influences on Health (3). Current research on the nutritional results of social and economic influences on food choices, including fad diets and nutrition for athletic performance. Strategies for influencing positive food choices.

FCS 579 Individual Research (1-3). Independent study. (May be repeated for a maximum of 4 cr.) Prerequisite: Consent of instructor.

FCS 580 FCS Classroom Management Techniques (3). For groups of career and technical teachers interested in improving student behavior management techniques; curriculum modifications for exceptional students; use of cooperative learning; eliciting parental and community support. Fifteen hours observation in an FCS middle or high school classroom during the spring prior to summer school.

FCS 581 Curriculum Methods in FCS (3). Distance education course. Emphasis is placed on curriculum, methods and techniques, resources, and facilities for teaching vocational Family and Consumer Sciences at the middle and high school levels. Those who have previously taken FCS 479 may not register for FCS 581. Prerequisite: EDF 501 or 538. (F, S, Su)

FCS/ELED 582 Methods of Early Childhood Education (4).

Developmentally appropriate curriculum, materials and methods for the early childhood classroom. Those who have previously taken FCS 482 may not register for FCS/ELED 582. Prerequisite: EDF 501 or 538. (F)

FCS/ELED 584 Practicum in Early Childhood Education (6).

Placement in an early childhood program. Supervised observation, planning, teaching, evaluation of learners and working with parents of young children. Prerequisite: FCS/ELED 565/565L or 482. (F, S, Su)

FCS 590 Graduate Project (1-6). A graduate project designed as a culminating exhibition of mastery of the content of the student's program.

FCS 591 Internship (3). Minimum of 240 clock hours of on-the-job experience intended for the teacher to better prepare students for employment in one of the following areas: food service; hospitality; clothing design; fashion merchandising. (F, S, Su)

FCS 593 Topics in Family and Consumer Sciences (1-3). As announced. (May be repeated for credit.)

Finance

FIN 541 Managerial Finance (3). Business organization and structure; techniques and problems of decision-making for efficient management, a basis for planning and controlling in relation to enterprise objectives. Prerequisite: Entry into the MBA program and completion of MBA common body of knowledge requirements.

FIN 579 Individual Research (1-3). Independent study. (May be repeated for a maximum of 3 cr.) Prerequisite: Approval of MBA coordinator required. (TBA)

FIN 593 Topics in Finance (1-3). As announced. (May be repeated for a maximum of 6 cr. with consent of advisor and the graduate coordinator.) Prerequisite: Consent of advisor and the graduate coordinator. (TBA)

French

FR 579 Individual Research (1-3). Graduate level independent study. (May be repeated for a maximum of 4 cr.) Prerequisite: Consent of instructor.

Geography

GEOG 579 Individual Research (1-3).

Independent study. (May be repeated for a maximum of 4 cr.). Prerequisite: Consent of instructor.

GEOG 593 Topics in Geography (1-3). As announced. (May be repeated for credit.)

Geology

GEOL 510 Environmental Geology (3). The human relationship to the geological environment: resources, utilization and exploitation; how geological processes past and present have altered economic sociological patterns. Prerequisite: Consent of instructor.

GEOL 520 Environmental Geochemistry (3). Review of basic chemical concepts. Geochemistry of natural waters, soil, and the atmosphere. Water, soil, and air pollution, hazardous waste, and toxicology. Prerequisites: Consent of instructor. (Alt S)

GEOL 524 Geology Summer Field Camp (8). Geological field procedures, techniques, and instrumentation used in eight weeks of field work in the classic geological areas of the Southwest: Arizona, New Mexico, Utah and Colorado. Prerequisite: GEOL 152/152L.

GEOL 539 Teaching in Earth Sciences (1). Methods, resources, safety and lesson plans in teaching geology lecture and laboratory. Prerequisite: Consent of instructor. Open only to students working toward teaching licensure.

GEOL 554 Geochemistry (3). Application of chemical principles to the study of geologic systems, aqueous geochemistry, crystal chemistry, surface chemistry, thermodynamics, oxidation-reduction, radioactive and stable isotopes, kinetics.

GEOL 569 Workshop in Geology (1-3). As announced. (May be repeated for a maximum of 6 cr.)

GEOL/ANTH/BIOL/PHYS 575 Scanning Electron Microscopy (2). Basic concepts of electron optics, resolution, scanning theory and image formation in the operation of the scanning electron microscope. Laboratory work will include SEM general maintenance, scope alignment, sample preparation and photographic procedures. Individual projects will be assigned. One hour lecture and three hours laboratory weekly. Lab fee charged to cover laboratory material.

GEOL 579 Individual Research (1-3).

Independent study. (May be repeated for a maximum of 4 cr.) Prerequisite: Consent of instructor.

GEOL 582 Geology of New Mexico (2).

The stratigraphic, structural and geomorphic history of New Mexico. Field trip required. Prerequisite: Consent of instructor.

GEOL 584 Geology of Western National Parks (3).

National parks in the American West: structure, stratigraphy and physiographic evolution.

GEOL 593 Topics in Geology (1-3). As announced.

(May be repeated for credit.)

Greek**GR 579 Individual Research: (1-3).**

Independent study. (May be repeated for a maximum of 4 cr.) Prerequisite: Consent of instructor.

GR 593 Topics in Greek (1-3). As announced.

(May be repeated for credit.)

Health and Physical Education**HPE 501 Research in Physical Education (3).**

Introduction to professional literature and design/methods including basic statistical techniques used in HPE and sport; development of a research question/problem, and an outline of literature review and research methods pertinent to the research problem.

HPE 503 Professional Writing (3).

The development of a three–chapter research proposal including informed consent and appropriate data analysis methods. Research and writing in a variety of styles for different professional venues. Prerequisite: HPE 501.

HPE 510 Psychosocial Aspects of Sports (3).

Sociological issues and psychological principles related to sport, including ethics, motivation, performance, aggression, leadership, communication, group dynamics and current issues.

HPE 511 Motor Learning (3).

Study of the theory, principles and factors involved in the development, learning and control of motor skills. Prerequisite: Undergraduate leveling course or consent of instructor.

HPE 516 Coaching of Sport (3).

Methods and principles of coaching individual and team sports at the secondary and post–secondary levels, including discipline techniques,

program planning, decision making skills, ethics, budget management and public relations.

HPE 518 Practicum I: Topics (1-3).

Supervised experiences with faculty, coach, staff. Students will observe and assist with planning, organizing, routine duties, maintaining records; and attend meetings. Prerequisite: Consent of instructor, department, and graduate advisory committee.

HPE 519 Practicum II: Topics (1-3).

Supervised experiences with faculty, coach, staff. Students will assist with planning, organizing, carrying out major project(s); evaluation of outcome/performance and attend meetings. Prerequisites: HPE 518 and consent of instructor, department and graduate advisory committee.

HPE 520 Practicum III: Topics (1-3).

Supervised experiences with faculty, coach, staff. Students assume major responsibility for project/event; evaluate outcome; help prepare for meetings. Prerequisites: HPE 518, 519, and consent of instructor, department and graduate advisory committee.

HPE 521 Physiology of Sport and Exercise (3).

Physiological adaptations, mechanisms of change of function taking place as a result of exercise. Physiological and environmental factors influencing human performance. Specificity training for a particular sport. Prerequisite: Undergraduate leveling course or consent of instructor.

HPE 525 Applied Biomechanics (3).

Biomechanical analysis of movement that includes synthesis of the laws and principles of motion, while using biomechanical principles and a motion analysis system. Prerequisite: Undergraduate leveling course or consent of instructor.

HPE 528 Motion Analysis for Coaches (3).

In–depth technological training on motion analysis systems, via computer technology, for the purpose of instructing coaches, teachers, trainers and other professionals involved in analyzing movement.

HPE 532 Facilities and Event Management (3).

Appropriate procedures in marketing and managing sport facilities and sport events.

HPE 533 Management/Organization in Sport/Physical Education (3).

Exploration of theories pertaining to management and

leadership; includes the study of traditional content areas (planning, organizing, staffing, budgeting, etc.) and the role of administration as applied to sport and physical education programs.

HPE 535 Exercise Prescription (3).

Application of human movement principles to developing physical activity/exercise programs for health-related and performance-related fitness. Includes training principles, assessment techniques and conditioning programs for various populations.

HPE 538 Sport Law (3). Laws and policies pertaining to physical education, intramural, recreation and athletic programs.

HPE 540 Scientific Principles of Strength and Conditioning (3). Principles and applications in the development and administration of strength, endurance, flexibility, speed and agility programs.

HPE 542 Program/Curriculum Design (3).

Program designs and implementation, examines trends influencing curriculum design. Provides design and implementation approaches directed toward the physical education setting. Curriculum evaluation strategies, the role of leadership in curriculum development and the incorporation of educational needs. Prerequisite: Undergraduate leveling course or consent of instructor.

HPE 548 Sport Marketing (3). Designed to acquaint students with the principles of marketing when applied to sports, recreation and institutional fund-raising.

HPE 569 Workshop in Physical Education (1-6). As announced. (may be repeated for a maximum of 6 crs).

HPE 575 Women's Sport/Wellness Issues (3). Survey of selected topics and issues in women's sports and wellness.

HPE 579 Individual Research (1-3).

Independent study. Prerequisite: Consent of instructor. (may be repeated for a maximum of 3 cr.)

HPE 589 Internship (3). Practical work experience in an area related to student's area of interest. Must have satisfactorily completed 15 hours of graduate coursework before enrolling. (graded satisfactory/unsatisfactory)

HPE 591 Graduate Seminar (1-3). As announced.

HPE 593 Topics in Physical Education (1-3). As announced.

HPE 599 Master's Thesis (1-6). The thesis submitted must provide evidence of sound scholarly method and demonstrate the student's capacity for research.

Hebrew

HEB 579 Individual Research (1-3).

Independent study. (May be repeated for a maximum of 4 cr.) Prerequisite: Consent of instructor.

HEB 593 Topics in Hebrew (1-3). As announced. (May be repeated for credit.)

History

HIST 579 Individual Research (1-3).

Independent study. (May be repeated for a maximum of 4 cr.) Prerequisite: Consent of instructor.

HIST 593 Topics in History (1-3). As announced. (May be repeated for credit.)

Humanities

HUM 569 Workshop in Humanities (1-3).

As announced. (May be repeated for a maximum of 4 cr.)

HUM 579 Individual Research (1-3).

Independent study. (May be repeated for a maximum of 4 cr.) Prerequisite: Consent of instructor.

HUM 593 Topics in Humanities (1-3). As announced. (May be repeated for credit.)

Management

MGT 501 Production Management and Quantitative Analysis (3).

Production/Operations Management (POM) includes the application of quantitative techniques for managerial decision making. Prerequisite: Entry into the MBA program and completion of MBA common body of knowledge requirements.

MGT 503 Human Resources Management

(3). Formulation and implementation of human resources policies to support organizational strategy. Prerequisite: BUS 582 or equivalent. (TBA)

MGT 513 Organizational Behavior (3).

Application of management theory for the development of individual, group, and organizational effectiveness. Prerequisite: Entry into the MBA program and completion of MBA common body of knowledge requirements.

MGT 536 Labor–Management Relations (3).

Study of the collective bargaining process and the development of policies for effective labor relations. Prerequisite: Completion of MBA common body of knowledge requirements. (TBA)

MGT 579 Individual Research (1-3).

Independent study. (May be repeated for a maximum of 3 cr.) Prerequisite: Approval of MBA coordinator required. (TBA)

Marketing**MKT 517 Marketing Management (3).**

Marketing and its importance in the economy and the firm. This course integrates the marketing functions and demonstrates the increasing complexity of the modern marketing system. Prerequisites: Entry into the MBA program and completion of MBA common body of knowledge requirements.

MKT 531 International Marketing (3).

Management of the marketing functions within the global environment. The course addresses the challenges in marketing to different environments with varying consumer behavior patterns and institutions. Prerequisite: Entry into the MBA program and completion of MBA common body of knowledge requirements. (TBA)

MKT 579 Individual Research (1-3).

Independent study. (May be repeated for a maximum of 3 cr.) Prerequisite: Approval of MBA coordinator required. (TBA)

MKT 591 Graduate Seminar (1-3).

Topics as announced. (May be repeated for a maximum of 6 cr. with consent of instructor.) (TBA)

MKT 593 Topics in Marketing (1-3).

As announced. (May be repeated for a maximum of 6 cr. with consent of advisor and graduate coordinator.) Prerequisite: Consent of advisor and graduate coordinator. (TBA)

Mathematics**MATH 501 Advanced Calculus I (3).**

Sequences, limits, functions of several variables, differentiation.

MATH 502 Advanced Calculus II (3). Series, integration, transformations. Prerequisite: MATH 501.

MATH 505 Analysis I (3). Real and complex number systems, set theory, sequences, series, continuity, differentiation. Prerequisite: Consent of instructor.

MATH 506 Analysis II (3). Sequences of functions, Fourier series, function of several variables, Euclidean and Hilbert spaces, measurable spaces, Riemann and Lebesgue integrals. Prerequisite: MATH 505.

MATH 507 Introduction to Complex Variables (3). Concepts of complex integration, differentiation and mappings.

MATH 509 Numerical Analysis I (3). Finite differences, interpolation summations, difference equations, solution of equations, numerical integration and differentiation, numerical solution of differential equations.

MATH 510 Numerical Analysis II (3). Least squares approximation of functions by polynomials and orthogonal functions; numerical solutions of eigenvalue–eigenvector problems.

MATH 511 Modern Algebra I (3). Group theory, Sylow theorems, ring theory.

MATH 512 Modern Algebra II (3). Vector spaces, modules, fields, field extensions, elements of Galois theory. Prerequisite: MATH 511.

MATH 513 History of Mathematics (3). Concepts, symbols, and operations in mathematics; mathematical history in the teaching and learning of mathematics.

MATH 515 Set Theory (3). Sets covering the elementary notions of sets and operations on sets, equivalence.

MATH 520 Combinatorial Analysis (3). Enumeration techniques: permutations, combinations, occupancy problems, generating functions, inclusion and exclusion, recurrence relations, Polya’s theory of counting. Prerequisite: Consent of instructor.

MATH 522 Graph Theory (3). Trees, networks, cycles and circuits, planarity, colorability, matching, independence. The emphasis is on algorithms. Prerequisite: Consent of instructor.

MATH 523 Partial Differential Equations I (3). Partial differential equations; Fourier series; techniques for solving heat, wave and potential equations.

MATH 524 Partial Differential Equations

II (3). Fourier integrals, partial differential equations in higher dimensions, numerical solutions, selected topics as time permits. Prerequisites: MATH 523.

MATH 525 Mathematical Logic (3).

Quantifiers, deductive proofs, predicate calculus, Godel's theorem.

MATH 529 Teaching of Mathematics (3).

Methodology in secondary mathematics. Classroom management, lesson plans, testing, evaluation, grades and record keeping, curriculum, teaching high school algebra and general mathematics.

MATH 542 Theory of Numbers (3).

Divisibility, congruences, quadratic residues, number theoretic functions, Diophantine equations, Farey fractions, algebraic numbers.

MATH 544 Research in Mathematics (3).

A reading course in the research literature in Mathematics. Each student will be expected to present a seminar and/or a paper on a research area.

MATH 551 Linear Algebra (3).

Advanced topics in linear algebra: topics include vector spaces, matrix algebra, inner product spaces, algebraic eigenvalue problems, Jordan forms, and computations with matrices.

MATH 569 Workshop in Mathematics

(1-3). As announced. (May be repeated for a maximum of 4 cr.)

MATH 579 Individual Research (1-3).

Independent study. (May be repeated for a maximum of 4 cr.) Prerequisite: Consent of instructor.

MATH 591 Graduate Seminar (1-3).

(May be repeated for a maximum of 4 cr.)

MATH 593 Topics in Mathematics (1-3).

As announced. (May be repeated for credit.)

MATH 599 Master's Thesis (1-6).

(MATH 599 credit must total 6 cr. for graduate degree.) Prerequisite: Consent of graduate advisory committee.

Music**Music Ensembles (1)**

MUS 526 Ensemble

- A. Choral
- B. Instrumental
- C. Band
- D. Orchestra

Applied Music (1-3)

Private lessons. One half-hour lesson per week for 1 cr. One-hour lesson per week for 2 cr. One-hour lesson plus a seminar per week or equivalent for 3 cr. (May be repeated for credit.)

MUS 508 Private Lessons/Non-Major

MUS 509 Private Lessons/Secondary Instrument

MUS 510 Voice

MUS 520 Piano

MUS 530 String Instruments

MUS 540 Woodwind Instruments

MUS 550 Brass Instruments

MUS 558 Composition

MUS 560 Percussion Instruments

MUS 590 Organ

MUS 509 Private Lessons/Secondary Instrument (1-3).

Private lessons for music majors on instruments (and voice) other than their principal instrument. Prerequisite: Consent of instructor. (F, S, Su)

MUS 569 Workshop in Music (1-3).

As Announced. (May be repeated for a maximum of 3 cr.)

MUS 579 Individual Research (1-3).

Independent study. (May be repeated for a maximum of 4 cr.) Prerequisite: Consent of instructor.

MUS 593 Topics in Music (1-3).

As announced. (No specific topic may be repeated for credit.)

Music Education**MUED 576 Elementary Music: Materials/**

Techniques (3). Study of Kodaly, Orff, and Weikart materials, methods and techniques appropriate for the elementary music specialist.

Philosophy

PHIL 569 Workshop in Philosophy (1-3). As announced. (May be repeated for a maximum of 6 cr.)

PHIL 579 Individual Research (1-3).

Independent study. (May be repeated for a maximum of 4 cr.) Prerequisite: Consent of instructor.

PHIL 593 Topics in Philosophy (1-3).

As announced. (May be repeated for credit.)

Physical Sciences

PHSC 593 Topics in Physical Science

(1-3). As announced. (May be repeated for credit.)

Physics

PHYS 501 Nuclear Physics (3). Experimental evidence and theories of nuclear physics; radioactivity, natural and artificial; nuclear reactions; radiation safety. Prerequisite: One year of college physics and one semester of calculus or consent of instructor.

PHYS 521 Electricity and Magnetism (3).

Vector calculus treatment of electrostatics, magnetostatics, properties of dielectrics and magnetic materials, Maxwell's equations, and electromagnetic radiation. Prerequisite: Consent of instructor. (Alt F)

PHYS 535 Quantum Physics (3). Applications of quantum theory to atomic physics, spin and other topics. Prerequisite: Consent of instructor. (Alt S)

PHYS 539 Teaching in Physics (1). Methods, resources, lesson plans in teaching physics; lecture and laboratory. Prerequisite: Consent of instructor. Open only to students working toward teaching licensure.

PHYS 569 Workshop in Physics (1-3). As announced. (May be repeated for a maximum of 6 cr.)

PHYS/ANTH/BIOL/GEOL 575 Scanning Electron Microscopy (2).

PHYS 579 Individual Research (1-3). Independent study. (May be repeated for a maximum of 4 cr.) Prerequisite: Consent of instructor.

PHYS 593 Topics in Physics (1-3). As announced. (May be repeated for credit.)

Political Science

PSCI 569 Workshop in Political Science (1-3). As announced. (May be repeated for a maximum of 6 cr.)

PSCI 579 Individual Research (1-3). Independent study. (May be repeated for a maximum of 4 cr.) Prerequisite: Consent of instructor.

PSCI 593 Topics in Political Science (1-3). As announced. (May be repeated for credit.)

Professional Technical Education

PTE 569 Workshop in Professional Technical Education (1-3). As announced. (May be repeated for credit.)

PTE 579 Individual Research in Professional Technical Education (1-3).

As announced. (May be repeated for credit.)

PTE 593 Topics in Professional Technical Education (1-3).

As announced. (May be repeated for credit.)

Psychology

PSY 569 Workshop in Psychology (1-3). As announced. (Will not count toward graduate degree.)

PSY 579 Individual Research (1-3). Independent study. (May be repeated for a maximum of 4 cr.) Prerequisite: Consent of graduate coordinator.

PSY 593 Topics in Psychology (1-3). As announced. (May be repeated for a maximum of 6 cr. with consent of graduate coordinator.) Prerequisite: Consent of graduate coordinator.

Reading Education

RED 505 Family Literacy (3). Study of families, children, communities, and school literacy practices. Focus on developing strategies for fostering school family literacy programs through an emphasis on ethnographic research and teaching of social equity. Prerequisite: RED 517. (Alt S)

ELED/ENG/SED 507 Teaching Writing (6). Prerequisites: Admission by application only. Application deadline is April 1. (Su)

RED 510 Literacy Assessment and Evaluation (3). Emphasis on naturalistic, authentic classroom based assessment of developmental readers and writers and the interrelationships between assessment and instruction. Major component will be the struggling reader within the regular classroom setting. Supervised instruction and the development of a student portfolio is required in on-campus clinic setting. Prerequisite: RED 517 (Su)

RED 512 Critical Literacy (3). Literacy examined for its critical potential as symbolic action: words rethinking worlds. Focus placed on the pedagogy of critical literacy as it pertains to a variety of educational settings. Prerequisite: RED 517. (Alt S)

RED 516 Literacy Assessment and Instruction for Special Populations (3). Naturalistic, authentic assessment strategies and the integration

of instructional strategies with assessment investigated with struggling readers and writers, K–8. Emphasis on best practices and current research as applied to special populations of students including learning disabilities, developmental delays, second language learners, gifted and talented students, physically challenged and social/emotional behavioral issues. Supervised instruction is required in on-campus clinic setting. Prerequisites: RED 510, 517. (F)

RED 517 Advanced Reading Theory/Philosophical and Historical Foundations of Reading (3). Emphasis on theoretical frameworks for reading including psycholinguistics, sociolinguistics, anthropology, constructivism, and progressive education as well as the historical foundations of reading instruction in the United States. Course is designed to provide an understanding of the reading process and evaluation of past and current approaches to teaching reading in the elementary and middle school setting. (S, Su)

RED 518 Content Area Literacy (3). Methods for teaching reading/writing in the content areas K–12. Emphasis integrating literacy across the disciplines using children's and young adult literature. Exploration of a variety of genres of literature and appropriate strategies for content area instruction. Prerequisite: RED 517 or consent of instructor for Alternate Licensure. (F, S, Su)

RED/ELED 520 Multiple Literacies (3). In-depth study of the multiple literacies that learners and readers encounter today, including linguistic and nonlinguistic texts. Within this context, the course will examine the impact of technology, multiple sign systems, semiotics, and various genres including multicultural children's literature on reading and learning in current classrooms. Prerequisite: RED 517. (Alt F)

RED 522 Pedagogy of College Reading (1). Methods for teaching Reading 100 at ENMU presented. Prerequisite: Consent of instructor. (F)

RED 540 Leadership and Literacy Programs (3). Organization, supervision, management, and outcome-based assessment of K–12 literacy programs presented.

Successfully fostering best practices and professional development for schools and districts explored. Prerequisite: RED 517. (Alt S)

RED 550 Whole Language: Theory/Practice/Evaluation (3). Emphasis on theoretical background in psycholinguistics, sociolinguistics, anthropology and progressive education as a basis for qualitative and naturalistic research, developmentally appropriate practice and authentic assessment. Prerequisite: RED 517. (Su)

RED 569 Workshop in Reading (1-3). As announced. (Up to 3 cr. may count toward graduate degree with prior approval of graduate advisory committee.)

RED 570 Emergent Literacy (3). Emergent literacy in context of family, language, community and culture. Family literacy issues from birth to age 7, early reading and writing development, age-appropriate practice, qualitative research in psycholinguistics and child development. Prerequisite: RED 517, may be taken concurrently. (F)

RED/ELED 581 Advanced Studies and Instructional Applications in Language Arts (3). A comprehensive study, based on principles of child growth and development, age-appropriate practice, qualitative research in psycholinguistics and child development. Prerequisite: RED 517, may be taken concurrently. (F)

RED 587 Balanced Literacy (3). Provides current research on a balanced literacy approach. Study of writing and reading development from childhood to adulthood using methods and materials for fostering phonemic awareness, word study, spelling and language investigations within a literature-based, writing-centered pedagogy. Prerequisite: RED 517. (S)

RED 590 Graduate Project (1-6). A graduate project designed as a culminating exhibition of mastery of the content of the student's program.

RED 593 Topics in Reading (1-3). As announced. (May be repeated for a maximum of 6 cr.)

RED 599 Master's Thesis (1-6). (RED 599 credit must total 6 cr. for graduate degree.) Prerequisite: Consent of graduate advisory committee.

Religion

REL 569 Workshop in Religion (1-3). As announced. (May be repeated for a maximum of 6 cr.)

REL 579 Individual Research (1-3). Independent study. (May be repeated for a maximum of 4 cr.) Prerequisite: Consent of instructor.

REL 593 Topics in Religion (1-3). As announced. (May be repeated for credit.)

Secondary Education

SED/ELED/ENG/RED 507 Teaching Writing (6). Prerequisites: Admission by application only. Application deadline is April 1.

SED/ELED 532 Technology Integrated Curriculum (3). The focus for this course is to support educators in designing lessons and courses that focus on developing and deepening student understanding while incorporating technology resources. (Su)

SED/ELED 535 The Technology Rich Environment (3). This course is designed to implement units supported by technology, within a classroom setting, perform action research using advanced curriculum design and enhance technology skills within a K–12 classroom. Prerequisite: ELED 532. (F)

SED/ELED 537 Technology Leadership (3). This course is designed to support educators as they transition into becoming an instructional technology leader within their school and district. Prerequisites: ELED 532 and 535. (S)

SED/ELED 540 Creativity Across the Curriculum (3). A study of the theoretical and practical aspects of creativity. Introduction to major definitions, theories and research, techniques for teaching, adapting curriculum, instruments, enhancing personal creativity and encouraging creativity in children.

SED 569 Workshop in Secondary Education (1-3). As announced. (Up to 3 cr. may count toward graduate degree with prior approval of graduate advisory committee.)

SED 579 Individual Research (1-3). Independent study. (May be repeated for a maximum of 4 cr.) Prerequisite: Consent of instructor.

SED 583 Field Studies in Secondary Education (1-3). (May be repeated with permission of instructor.) Prerequisite: Consent of instructor. Approval for this course must be received prior to the semester taken.

SED 590 Graduate Project (1-6). A graduate project designed as a culminating exhibition of mastery of the content of the student's program.

SED 593 Topics in Secondary Education (1-3). As announced. (May be repeated for a maximum of 6 cr.)

SED 597 Internship (3). Field-based teaching experiences in a public secondary school that has a state approved mentorship program; provides opportunities to develop skills in state board of education approved secondary teaching competencies. Prerequisites: Admission to Alternative Secondary Licensure Program, EDF 500, 515, 530 and 538. (F)

SED 599 Master's Thesis (1-6). (SED 599 credit must total 6 cr. for graduate degree.) Prerequisite: Consent of graduate advisory committee.

Sociology

SOC/FCS 515 Problems in the Family (3). Marital difficulties and tensions, application in the field.

SOC/EDF 535 Sociology of Education (3). Educational institutions and problems in teaching practices in schools.

Spanish

SPAN 510 Mexican Culture and Civilization: Immersion (3). An intensive study of Mexican culture and civilization, with special attention to Mayan culture in the Yucatan, as part of a total immersion study program in Mexico. (Su)

SPAN 511 Mexican Literature: Immersion (3). An intensive study of Mexican literature as part of a total immersion study program in Mexico. Course content will vary. (Su)

SPAN/BLD 515 Hispanic Literature and Culture (3). This course will examine cultural aspects unique to Hispanic literature and culture. It will introduce folktales, short stories, poetry, handouts, and films on the different aspects of Hispanic literature and culture. Class will be held in a seminar discussion. (Instruction in Spanish.)

SPAN 569 Workshop in Spanish (1-3). As announced. (May be repeated for a maximum of 4 cr.)

SPAN 579 Individual Research (1-3).

Independent study. (May be repeated for a maximum of 4 cr.) Prerequisite: Consent of instructor.

SPAN 591 Seminar in Spanish Studies (3).

Intensive study of a designated topic in Spanish–language literature or linguistics. Course content will vary. A. Latin American Literature. B. Peninsular Literature. C. Spanish Language Studies. (F, S)

SPAN 593 Topics in Spanish (1-3).

As announced. (May be repeated for credit with instructor/advisory committee/coordinator approval.)

Special Education

SPED 501 Exceptional Student in the Regular Classroom (3).

Overview of special education and various disabling conditions; designed to help regular classroom teachers identify and work with exceptional children. Will not count toward graduate degree in special education or for certification in SPED. (Su)

SPED 503 Special Education Law (3).

The study of the legal development of special education and the current legal requirements in providing a free appropriate education to students with disabilities. Prerequisites: SPED 501 or consent of instructor.

SPED 505 Severe and Profound Disabilities: Theory to Practice (3).

Research and principles of severe and profound disabilities; definitions, etiology, characteristics, classifications, prevalence, curricula, management, adaptive devices, methods, and materials. Prerequisite: Six hours in special education coursework, or consent of instructor.

SPED 509 Gifted: Theory to Practice (3).

Research and principles of gifted and talented education; definitions, identification, characteristics, classifications, prevalence, curricula, management, methods and materials. Prerequisite: Six hours in special education coursework or consent of instructor.

SPED 534 Mental Retardation: Theory to Practice (3).

Research and principles of mental retardation; definitions, etiology, characteristics, classifications, prevalence, curricula, management, methods and materials.

Prerequisite: Six hours in special education coursework or consent of instructor.

SPED 539 Classroom and Behavior Management (3).

Major concepts and techniques of effective classroom and behavior management utilizing technologies for applied behavior analysis and the theories and methods of positive behavior support. Issues focusing on manifestations determinations, functional behavior assessment and behavior intervention plans will be presented as well as information on token economics and behavioral level systems to apply in the classroom.

SPED 540 Learning Disabilities: Theory to Practice (3).

Research and principles of learning disabilities; definitions, etiology, characteristics, classifications, prevalence, curricula, management, methods and materials. Prerequisite: Six hours in special education coursework or consent of instructor.

SPED 543 Communication and Collaboration Methods (3).

Leadership skills, collaboration, communication, transition and coordination with other professionals and families of exceptional students.

SPED 547 Internship in Special Education (3).

During the last semester of the Alternative Licensure Program, students will complete SPED 547–Internship. The internship course will act as the student teaching component for the Alternative Licensure Program. During the internship experience, students will complete projects with components from all previous course work. Students will be observed by an Internship co-operating teacher as well as an ENMU supervising instructor a minimum of three times (combined) throughout the semester. This course does NOT count towards a Masters Degree in Special Education at Eastern New Mexico University. (F, S)

SPED 548 Behavior Disorders: Theory to Practice (3).

Research and principles of behavior disorders/emotional disturbance; definitions, etiology, characteristics, classifications, prevalence, curricula, management, methods and materials. Prerequisite: Six hours in special education coursework or consent of instructor. (S)

SPED 569 Workshop in Special Education (1-3).

As announced. (May be repeated for a maximum of 3 cr.).

SPED 570 Special Theory to Practice Courses

(1-3). Theory to Practice investigates disabilities commonly seen in the public school classroom. The topical courses will offer students knowledge and skills to work with students diagnosed with the variety of disabilities investigated. Theory and research will be coupled with active practice in the classroom. SPED 570 may be repeated for credit as the topical offerings vary. SPED 570 course will fulfill elective credit in the master's level program or may be used as continued learning courses.

A. ADHD/TBI	3 credits
B. TBI	1 credit
C. ADHD	1 credit
D. Autism/Asperger's Syndrome	1–3 credits
E. Medical Problems in Classroom	1–3 credits
F. Seizures and Epilepsy	1 credit
G. Sensory Integration	1–3 credits
H. Early Child/ Special Education	3 credits

SPED 579 Individual Research (1-3). (May be repeated for a maximum of 4 cr.) Prerequisite: Consent of instructor. Approval for this course must be received prior to the semester taken.

SPED 580 Professional Educator (1-3). The needs of special educators are as varied as the students in the classroom. Continual professional enrichment is required to stay abreast of the newest topics, needs and demands of the discipline. SPED 580 will provide up-to-date relevant topical courses which can be used for electives in the master's of special education degree, or as professional development enrichment course work. SPED 580 may be repeated for credit as the topical offerings vary.

A. Section 504 of the Vocational Rehabilitation Act of 1973	1 credit
B. Pre-referral Process and Interventions	1–3 credits
C. Working with Paraprofessionals	1–3 credits
D. Transition	1–3 credits
E. Language Development	3 credits
F. Disability Awareness	3 credits
G. Process of Special Education	1–3 credits
H. FBA/BIP	1–3 credits
I. Positive Behavior Supports	1–3 credits
J. Working with Non-verbal Students	1–3 credits
K. Part C Intervention	1–3 credits

SPED 583 Field Studies in Special Education (1-3). As announced. Prerequisite: Consent of instructor. Approval for this course must be received prior to the semester taken.

SPED 590 Graduate Project (1-6). A graduate project designed as a culminating exhibition of mastery of the content of the student's program.

(SPED 590 credit must total 6 cr. for graduate degree.) Students may register for 1–3 hours per semester to reach the total required.

SPED 593 Topics in Special Education (1-3). As announced.

SPED 599 Master's Thesis (1-6). (SPED 599 credit must total 6 cr. for graduate degree.) Prerequisite: Consent of graduate advisory committee. Students may register for 1–3 hours per semester to reach the total required.

Statistics

STAT 500 Statistical Analysis I (3). Basic statistical research methodology; techniques of statistical inference. Prerequisites: Graduate standing; not open to students majoring in mathematics.

STAT 503 Probability and Mathematical Statistics I (3). Probability theory, discrete and continuous probability distributions, mathematical expectation, joint distributions, and moment generating functions.

STAT 504 Probability and Mathematical Statistics II (3). The theory of estimation, prediction and hypothesis testing. Prerequisite: STAT 503.

STAT 513 Statistical Analysis II (3). One and two-sample tests and associated confidence intervals for means and proportions; one and two-way analysis of variance; correlation and regression methods, contingency tables. Prerequisite: STAT 500 or consent of instructor.

STAT 514 Nonparametric Methods (3). Distribution-free techniques, based on order statistics and ranks; nonparametric tests of statistical hypotheses. Prerequisite: STAT 513 or consent of instructor. (Alt S)

STAT 515 Survey Sampling Methods (3). Basic sampling designs (random, cluster, stratified, multi-stage); selection of the appropriate design and sample size. A survey will be undertaken by the class. Prerequisite: STAT 513 or consent of instructor. (Alt F)

STAT 517 Introduction to Operation Research (3). Philosophy and techniques of operation research. Linear programming, simplex method and duality; transportation and assignment problems; game theory; introduction to dynamic programming; PERT and CPM. Applications to business and industrial problems. Prerequisite: Consent of Instructor.

STAT 531 Design of Experiments (3). The design and analysis of statistical experiments and the theory of linear models; analysis of variance techniques. Prerequisite: Consent of instructor.

STAT 532 Statistical Packages (3). Large data sets analyses with the aid of the programmed statistical package SAS (Statistical Analysis System). Prerequisite: STAT 531.

STAT 569 Workshop in Statistics (1-3). As announced. (May be repeated for a maximum of 6 cr.)

STAT 579 Individual Research (1-3). (May be repeated for a maximum of 4 cr.) Prerequisite: Consent of instructor.

STAT 593 Topics in Statistics (1-3). As announced. (May be repeated for credit.)

Theatre

THTR 569 Workshop in Theatre (1-3). As announced. (May be repeated for a maximum of 6 cr.)

THTR 579 Individual Research (1-3). Independent study. (May be repeated for a maximum of 4 cr.) Prerequisite: Consent of instructor.

THTR 593 Topics in Theatre (1-3). As announced. (May be repeated for credit.)