



## GRADUATE COURSES OF INSTRUCTION

Sections of courses are listed in alphabetical order,  
by the prefix of the academic discipline.

Most credit notations on the far right are in the pattern 3-0-3. The first number is the number of lecture hours (or equivalent) each week; the second number is the number of laboratory hours (or equivalent) each week; the third number is the number of semester hours credit. The suffix “K” designates courses in which a laboratory is included; the suffix “L” designates a lab course that is separate.

### ACED:ADULTAND CAREER EDUCATION

- ACED 7000 Foundations and Trends in Business Education** 2-0-2  
An overview of the history and development of the field of business education. Emphasis on the various components of the business education profession; federal and state legislative implications for business education; current trends, issues, and problems in business education; and contributions of various leaders in the field of business education.
- ACED 7020 History and Philosophy of Adult and Career Education** 3-0-3  
Inquiry into the background, purpose, philosophies, policies, and principles of career education. Students will study the impact of federal and state legislation.
- ACED 7030 Curriculum Issues and Trends in Adult and Career Education** 3-0-3  
Principles, procedures, and considerations for developing curriculum in adult and career education.
- ACED 7100 Current Practices in Training and Development** 3-0-3  
Introduction to training and development, organizational development, and human resource development. Emphasis on models of program design, needs assessment, costs, and benefits to the sponsoring corporation or agency; and methods of enhancing human performance.
- ACED 7110 Introduction to Human Performance Technology** 3-0-3  
An introduction to the emerging performance technology field. Students develop skills in performance analysis and benchmarking, change management, and in the design of effective performance interventions, excluding training. The role of internal and external consultants is examined.
- ACED 7120 Electronic Courseware Design and Development** 3-0-3  
An overview of emerging technologies used to develop interactive, computer-based training applications for distribution via corporate Intranets, the Internet, and CD-ROM. Emphasis is placed on learning technical skills and design skills while developing a broad understanding of the capabilities and limitations of computer-based training applications in corporate and other adult education settings.

- ACED 7150 Perspectives on the Adult Learner** 3-0-3  
Facilitation of learning and performance improvement in the workplace and adult education environment. The course includes application of instructional methods, informal and incidental learning strategies, coaching, team building, and formal and informal on-the-job learning tactics. The course also focuses on facilitating individual and group learning to effect organizational change.
- ACED 7200 Improvement of Instruction in Keyboarding** 3-0-3  
Development of strategies for teaching keyboarding. Emphasis on course objectives, equipment, materials, skill development, standards, and evaluative criteria.
- ACED 7220 Improvement of Instruction in Computer Technology** 3-0-3  
An analysis of methods, strategies, and problems associated with teaching computer technology courses. Also included are the selection and acquisition of state-of-the-art hardware and software and the design and maintenance of a technology lab in an educational setting.
- ACED 7230 Improvement of Instruction in Accounting and Basic Business Subjects** 3-0-3  
Strategies for teaching accounting and basic business subjects. Emphasis is placed on examining the use of computers in the teaching/learning process; motivation techniques; evaluation tools; and application of research to the instructional process.
- ACED 7240 Improvement of Instruction in Office Education** 3-0-3  
Competencies needed by students preparing for office work are analyzed; teaching methods, course content, and evaluation procedures are discussed.
- ACED 7300 Practicum in Adult/Career Education** 3 hours credit  
**Prerequisite: Major in appropriate specialization; permission of the advisor must be obtained before registration.**
- ACED 7310 Practicum in Adult/Career Education** 3 hours credit  
**Prerequisite: Major in appropriate specialization; permission of the advisor must be obtained before registration.**
- ACED 7400 Computer Technology for the Workplace** 3-0-3  
Introductory, hands-on computer applications for development of workplace skills. Topics include word processing, databases, spreadsheets, communication, and presentation software.
- ACED 7410 New Teacher Institute** 6-0-6  
Basic instructional and management skills for new secondary career education teachers. Emphasis is on survival skills related to teaching methodology and curriculum implementation that will help them to be successful during their first or second year of teaching.
- ACED 7500 Organization and Administration of Career Education** 3-0-3  
Organization of career education on the local, state, and national levels; federal and state government roles; and types of career education programs in education and industry.
- ACED 7530 Supervision of Adult and Career Education Programs** 3-0-3  
Selection and evaluation of personnel, supervisory techniques, and methods of leadership for leaders in education and industry.
- ACED 7600 Applied Computer Technology** 3-0-3  
**Prerequisite: ACED 2400/ACED 7400 or consent of instructor.** Development of instructional materials for specific teaching areas using the advanced features of word processing, spreadsheets, databases, communication, and presentation software. Designed for in-service teachers and will require the development of practical computer-related projects which can be used in the teachers' respective classrooms.
- ACED 7620 Evaluation of Adult and Career Education Programs** 3-0-3  
Development and understanding of program evaluation methodology for the purpose of school improvement. Emphasis placed on alternative approaches, models, and practical guidelines.

- ACED 7640 Issues and Trends in Adult and Career Education** 3-0-3  
Exploration and analysis of recent research and societal developments affecting adult and career education. Emphasis is on ethical and professional responsibilities, liability, emerging trends, and issues.
- ACED 7680 Improvement of Instruction in Adult and Career Education** 3-0-3  
Theory and practical application of various delivery techniques, principles of teaching and learning, and the development of instructional materials.
- ACED 7740 Educators and Industry** 3-0-3  
Designed to increase career awareness among educators, students, business and industry, and the community. Interaction among educators, business and industry, and community leaders concerning how to meet the needs of local industry.
- ACED 7850 Adult and Career Education Internship** 3 hours credit  
**Prerequisite: Permission from instructor.**
- ACED 7900 Special Topics in Adult and Career Education** 3-0-3  
**Prerequisite: Permission from instructor.** Exploration of topics specific to adult and career education. Emphasis is on the examination of adult and career education research, as applied to educational and/or business settings.
- ACED 7950 Directed Study in Adult and Career Education** 1-0-1 to 3-0-3  
**Prerequisite: Consent of the department head.** An opportunity for intensive individual study on an approved topic.
- ACED 7990 Evaluation and Analysis of Research in Business Education** 3-0-3  
Develop and enhance students' ability to analyze relevant research in business education. Emphasis placed on research methodology, research findings, and implementations and implications for business education.
- ACED 8310 Communication Theory** 3-0-3  
Focus on the development of communication theory. An examination of organizational culture, perception and communication, interpersonal patterns, communication barriers, and nonverbal communication.
- ACED 8450 Multimedia Authoring and Design** 3-0-3  
Provides skills in designing and authoring multimedia courseware for education and training environments. Emphasis placed on using multimedia authoring and presentation software to design dynamic materials for individualized and group instruction.
- ACED 8530 Instructional Supervision in Adult and Career Education** 3-0-3  
Information and experiences for the development of skills related to supervision of instruction in the career education classroom and laboratory.
- ACED 8995 Practicum in Adult/Career Education** 3 hours credit  
**Prerequisite: Consent of the department head.**
- ACED 9400 Adult Learning Strategies** 3-0-3  
Design, development, and implementation of adult learning programs. Particular emphasis will be placed on curriculum models, goals, organization, methodology, career development, and evaluation for adult learners and learning programs.
- ACED 9410 Students with Special Needs in Adult and Career Education** 3-0-3  
Integration of instructional and/or management activities in assisting students with special needs in adult and career education programs. Emphasis will be placed on regulations, interagency activities, curriculum, transition, assessment, and instruction of learners.
- ACED 9420 Issues in Adult and Career Education** 3-0-3  
Emphasis on topics relating to adult and career education that are considered to be especially significant to the field because of current research developments and legislation.
- ACED 9430 Leadership in Adult and Career Education** 3-0-3  
Exploration of theory and development of leadership in adult and carer education settings. Emphasis will be placed on identifying effective leadership characteristics, expanding leadership skills, and developing a philosophy of effective leadership.

**ACED 9440 Seminar in Adult and Career Education** 3-0-3

Exploration of topics specific to adult and career education in industry and/or educational settings. Emphasis will be given to examination of research, as applied in the public and private sectors.

**ACED 9999 Dissertation in Adult and Career Education** 1 to 3 hours credit

**Prerequisite: Completion of major courses and approval of advisor or dissertation chair.** Development and defense of the dissertation proposal and the dissertation. Must be taken each fall and spring semester until the dissertation is completed. Number of hours taken per term must be approved by the dissertation chair. A minimum of 9 hours must be completed.

**ARED: ART EDUCATION**

**ARED 6150 Stimulating Creative Behavior** 3-0-3

The study of theories of creativity, visual thinking, creative problem finding and problem solving strategies, identifying external and internal blocks to creativity, testing for creativity, the relationships between creativity, cognition, and visual thinking, and creative thinking challenges and stimuli. An emphasis is placed on methods to elicit creative behavior.

**ARED 6900 Special Topics in Art and Art Education** 1-0-1 to 3-0-3

A special course designed to fit a special need in the curriculum. May be used for a study abroad course or for inter-sessions as is appropriate. May be repeated for up to 6 graduate hours.

**ARED 6950 Workshop in Art Education** 0-2-1 to 0-6-3

An intensive summer or inter-session course designed to serve a special need for instructional methods or curricular design in art education contexts.

**ARED 7150 Research Problems In Art Education** 3-0-3

**Prerequisites: RSCH 7100 and ARED 7500.** Analysis of selected studies in the field of Art Education. Students will prepare a research proposal.

**ARED 7450 Art Education Curricula** 3-0-3

**Prerequisite: Art Education major or permission of the department head.** The study of art curricula, philosophies, rationales, purposes and goals in American schools, K-12. Field applications and observations are required.

**ARED 7500 Issues And Trends In Art Education** 3-0-3

The study of selected issues and current trends in the field of Art Education. A research paper and /or project and field applications are required.

**ARED 7670 Aesthetic Inquiry And Art Criticism** 3-0-3

**Prerequisites: Nine semester hours of art history or equivalent background.** This course will focus on aesthetics and critical methods for art and Art Education. Field applications of critical methods and/or issues related to aesthetics are required.

**ARED 7900 Directed Study in Art Education** 1 to 3 hours credit

**Prerequisites: Approval of the instructor and department head.** Selected individual problems in art education as defined by the student with the approval and guidance of the supervising instructor. May be repeated for credit.

**ARED 7930 Capstone Project** 1 to 3 hours credit

**Prerequisite: RSCH 7100.** A capstone course wherein students will develop, with departmental approval, applied research projects based on research findings, curriculum issues, or methodological studies relevant to Art Education contexts. Field applications are required. For students not selecting the thesis option.

**ARED 7950 Art Administrative Internship** 1 to 3 hours credit

**Prerequisites: Master of Art Education students only.** Approval of Department Head and Graduate Program Coordinator. A capstone supervised clinical experience within a local,

regional, or state art agency, museum, gallery, or approved organizational art facility for the purpose of interning and working with an experienced art administrator. Required for students not seeking certification. May be repeated.

**ARED 7999 Thesis**

**1 to 3 hours credit**

**Prerequisite: RSCH 7100.** A capstone research course resulting in the proposal and preparation of a thesis in APA style. A thesis defense is required. For students not selecting the terminal project option.

**ART: ART STUDIO**

**ART 6000 Watercolor**

**0-6-3**

A course designed for the student who is experienced with aqueous media and has demonstrated success as a self-directed watercolor painter. Students are expected to provide a portfolio for review by the instructor. The student will develop and resolve artistic problems relevant to the media. Works produced will undergo analysis and critical reviews. This course may be repeated for credit.

**ART 6100 Ceramics**

**0-6-3**

**Prerequisite: Three semester hours credit of intermediate ceramics at the undergraduate level or permission of the instructor.** This course emphasizes wheel throwing techniques, decorative processes, ceramic materials formulation, and firing strategies.

**ART 6200 Drawing And Composition**

**0-6-3**

**Prerequisite: Three semester hour credits of intermediate drawing at the undergraduate level or permission of the instructor.** The study of drawing in various media with an emphasis on individual stylistic development. The production of a thematic portfolio and solo or group exhibition is expected.

**ART 6450 Painting**

**0-6-3**

**Prerequisite: Three semester hour credits of intermediate painting at the undergraduate level or permission of the instructor.** This course requires the student, under the guidance of the instructor, to develop individualized problems in painting using a variety of media and techniques. The emphasis is on the development of a personal stylistic approach to painting. A solo or group exhibition is expected.

**ART 6650 Technical Problems in Art**

**0-2-1 to 0-6-3**

**Prerequisite: Permission of the instructor.** A course for advanced students capable of independent research and study in the production of a body of related works in selected media. A problem statement and procedural plan will be developed. A solo or group exhibition is required.

**ART 6950 Workshop in Art**

**0-2-1 to 0-6-3**

Selected topics presented in an intensive workshop setting for studio production of art works. Critical reviews and the exhibition of art works produced are expected. May be repeated for credit under different topic headings.

**ART 7070 Electronic Imaging**

**0-6-3**

**Prerequisite: Three semester hours credit at the undergraduate level or permission of the instructor.** This course emphasizes the application of computer graphics processes to visual arts problems. Students will demonstrate an understanding of the range of computer graphics applications, a working knowledge of selected graphics software, and will prepare still or animated work for presentation. Specific assignments will be developed in relation to the student's professional goals.

**ART 7900 Directed Study in Art**

**0-2-1 to 0-6-3**

**Prerequisite: Approval of the instructor and Department Head.** Individual problems in art selected and defined with approval of the supervising instructor. May be repeated for credit.

## ARTH: ART HISTORY

**ARTH 6510 Special Topics in Art History and Criticism** 1-0-1 to 3-0-3

**Prerequisite:** ART 1100 or equivalent undergraduate art history/appreciation course.

A seminar course for the study of special topics or contemporary trends in art, art history, and art criticism. Research, analysis, and short essays will be emphasized. Course may be repeated for credit.

**ARTH 7650 Late Twentieth Century Art** 3-0-3

**Prerequisite:** nine semester hour credits of art history at the undergraduate or graduate level. This course examines the art and theories of art from 1970 to the present.

Students will identify, classify, and place in theoretical context selected works of late twentieth century art. A critical essay and presentation a selected contemporary issue or theory is expected.

## ASTR: ASTRONOMY

**ASTR 5101-5102 Principles of Astronomy I, II** 3-2.5-4 each

A calculus-based course covering astronomical observations, analysis of celestial motions, and a study of the solar system in 5101, and covering the physics of the Sun and stars, stellar evolution, galactic structure and the universe in 5102.

**ASTR 5400 Planetary Geology** 3-0-3

**Prerequisite:** ASTR 1010 or GEOL 1121 or GEOG 1113. **Prerequisite or co-requisite:** PHSC 1100 or PHYS 1111 or PHYS 2211. A study of the geology of the terrestrial planets and solid-surface moons, asteroids, comets, and meteorites. The course will focus on comparative planetary geology, with emphasis on geologic processes on the surface, planetary interiors, and data collection methods such as remote sensing and image analysis.

**ASTR 6100 Observational Techniques** 2-2-3

Aspects of instrumental and observational astronomy including the optics of the telescope, spectroscopy, photography, photometry, electronics, CCDs, astrometrical problems, the operation of the observatory, and mathematical methods of data reduction.

**ASTR 6400 Physics of the Solar System** 3-0-3

Celestial mechanics; physical features of the Sun, planets, moons, and other material in the solar system.

**ASTR 6410 Astrophysics** 3-0-3

Radiative transfer in the stellar atmosphere, the interior structure of stars, stellar evolution, physical processes in gaseous nebulae, cosmology.

**ASTR 6800 Internship in Astronomy** 0-6-3 to 0-12-6

Active participation in research in astronomy, or in some field of science closely allied with astronomy, or work with a planetarium or museum which involves planetarium operations and programs. A daily log of activities, a report on the work done, and a research paper relating the work done to the field of astronomy are required.

**ASTR 6900 Special Topics in Astronomy** 1-0-1 to 4-4-6

Topics to be assigned by instructor; may be taken more than once if topics are different; up to a total of 6 credit hours.

**ASTR 6950 Directed Study in Astronomy** 1-0-1 to 4-4-6

Study in area or subject not normally found in established courses offered by the department; may also allow student to explore in more detail and/or depth an area or subject covered by the department in astronomy; up to a maximum of 6 credit hours.

## BIOL: BIOLOGY

- BIOL 5000 Biostatistics** 2-4-4  
**Prerequisite: Admission into the graduate program or permission of the instructor.**  
An introduction to univariate and multivariate analyses of data. Laboratory work will allow students to collect data typical of the diverse disciplines in biology and subject data to appropriate biometrical analyses, using a calculator or computer. Students will be required to keep a detailed lab notebook of the statistical methods studied and also complete a term project and a scientific report. Two 2-hour laboratory periods per week.
- BIOL 5100 Microbiology** 3-3-4  
**Prerequisite: Admission into the graduate program or permission of the instructor.**  
Survey of microbiology covering eubacteria, archaebacteria, protozoa, fungi, algae, and viruses. Includes fundamental techniques, microbial physiology and genetics, biotechnology, medical applications, and applied microbiology. Two 1.5 hour laboratory periods per week.
- BIOL 5200 Genetics** 3-3-4  
**Prerequisite: Admission into the graduate program or permission of the instructor.**  
A survey of modern genetics including: Mendelian and molecular genetics, as well as selected topics in population and quantitative genetics and genetic engineering. Laboratory will emphasize genetic analysis using live *Drosophila* and computer simulated crosses, chi-square analysis of progeny data, and application of these principles to laboratory analysis of genetic variation at the DNA level.
- BIOL 5300 Ecology** 3-3-4  
**Prerequisite: Admission into the graduate program or permission of the instructor.**  
**Corequisite: BIOL 3200, or consent of instructor.** Basic ecological principles including behavior of individuals, populations, and communities in the context of their physical and biotic environments. Reviews population genetics and basic evolution; emphasizes scientific method, including the role of theory, hypothesis testing, statistical analysis and scientific writing. Observation and data collection mostly in the field within a variety of local ecosystems. One weekend field trip required.
- BIOL 5400 Plant Physiology** 3-3-4  
**Prerequisite: Admission into the graduate program or permission of the instructor.**  
An introduction to basic principles of plant function including physical processes occurring in plants, water relations in whole plants and plant tissues, cell physiology and biochemistry, and growth and development.
- BIOL 5450 Vertebrate Physiology** 3-3-4  
**Prerequisite: Admission into the graduate program or permission of the instructor.**  
Study of general physiological processes of vertebrates; emphasis at organ and organ system levels.
- BIOL 5500 Mycology** 3-3-4  
**Prerequisite: Admission into the graduate program or permission of the instructor.**  
Biology of fungi with emphasis on morphology, taxonomy, physiology, and ecology, includes the roles of fungi as both beneficial organisms and as causal agents in plant and animal diseases.
- BIOL 5550 Phycology** 3-4-4  
**Prerequisite: Admission into the graduate program or permission of the instructor.**  
An introduction to the study of the algae, including taxonomy, phylogeny, physiology, and ecology. Laboratories will focus on the examination of live material, and will include methods for the isolation and culture of algae.
- BIOL 5600 Local Flora** 3-3-4  
**Prerequisite: Admission into the graduate program or permission of the instructor.**  
A field-oriented study emphasizing identification, distribution, and ecology of locally occurring seed-bearing plants. Two or three weekend field trips are routinely scheduled.

- BIOL 5650 Plant Systematics** 3-3-4  
**Prerequisite: Admission into the graduate program or permission of the instructor.**  
 A survey of the principles of plant systematics that includes identification, nomenclature, evolution, and classification within the plant kingdom, and a systematic survey of plant families, with emphasis on local representatives.
- BIOL 5800 Invertebrate Zoology** 3-3-4  
**Prerequisite: Admission into the graduate program or permission of the instructor.** A study of the morphology, phylogeny, and ecology of invertebrates.
- BIOL 5810 Introduction to Biogeography** 3-0-3  
**Also offered as GEOG 5810. Prerequisite: Admission into the graduate program or permission of the instructor.** An overview of factors controlling the distribution of plants and animals on the Earth. Topics discussed include ecological and evolutionary processes, geophysical and climatic phenomena, and historical and anthropogenic events that have influenced current distributions.
- BIOL 5840 Entomology** 3-3-4  
**Prerequisite: Admission into the graduate program or permission of the instructor.** Introduction to the study of insect biology including ecology, behavior, and taxonomy. Laboratory includes field observation, sampling and identification of local fauna.
- BIOL 5870 Parasitology** 3-3-4  
**Prerequisite: Admission into the graduate program or permission of the instructor.** A study of the morphology, life cycles, and host-parasite relationships of representative protozoan and metazoan parasites. Human parasites are emphasized.
- BIOL 5900 Ichthyology** 3-3-4  
**Prerequisite: Admission into the graduate program or permission of the instructor.** A study of the taxonomy, distribution, ecology, behavior and evolution of freshwater and marine fishes. One or two overnight field trips on weekends will be scheduled, with emphasis placed on the collection and preservation of specimens and the identification of habitats occupied by various species. Other field trips scheduled during normal laboratory periods.
- BIOL 5920 Herpetology** 3-3-4  
**Prerequisite: Admission into the graduate program or permission of the instructor.** Introduction to the study of amphibians and reptiles, including anatomy, physiology, ecology, behavior, and classification coordinated with field study of local species.
- BIOL 5950 Ornithology** 3-3-4  
**Prerequisite: Admission into the graduate program or permission of the instructor.** Lectures on morphology, evolution, ecology, behavior, and distribution of birds of the world. Lab emphasizes gross anatomy and identification of local species by sight and sound; mostly in the field. Five-day field trip to south Florida required; other Saturday trips offered.
- BIOL 5980 Mammalogy** 3-3-4  
**Prerequisite: Admission into the graduate program or permission of the instructor.** Lectures emphasize morphology, evolution, ecology, zoogeography and classification of mammals of the world. Lab emphasizes gross anatomy and identification of mammal specimens, especially those found in North America. Four-day field trip to Blue Ridge Mountains (NC) required; Manatee dive (FL) offered.
- BIOL 6000 Topics in Biology I** 3-0-3  
**Prerequisite: Admission into the graduate program or permission of the instructor.** Selected topics in the biological sciences. May be repeated if the topic is different. This course does not include a laboratory
- BIOL 6010 Topics in Biology II** 3-3-4  
**Prerequisite: Admission into the graduate program or permission of the instructor.** Selected topics in the biological sciences. May be repeated if the topic is different. This course includes a laboratory.



- BIOL 6100 Morphology of Land Plants** 3-3-4  
**Prerequisite: Admission into the graduate program or permission of the instructor.**  
 Study of vegetative organization and reproductive cycles of bryophytes, pteridophytes and seed plants, which incorporates phylogenetic and ecological relationships.
- BIOL 6200 Plant Anatomy** 3-3-4  
**Prerequisite: Admission into the graduate program or permission of the instructor.**  
 Origin and development of tissues and organs of vascular plants. The laboratory stresses microtechnique including preparation of plant tissues in paraffin and plastic resins, sectioning, staining for specific components of plant tissues, and use of different optical methods.
- BIOL 6300 Comparative Vertebrate Anatomy** 3-3-4  
**Prerequisite: Admission into the graduate program or permission of the instructor.**  
 Anatomical and phylogenetic survey of representative vertebrate animals.
- BIOL 6350 Vertebrate Embryology** 3-3-4  
**Prerequisite: Admission into the graduate program or permission of the instructor.** A study of the fertilization process and embryology of selected vertebrates with the greatest emphasis placed on chick development.
- BIOL 6400 Vertebrate Histology** 3-4-4  
**Prerequisite: Admission into the graduate program or permission of the instructor.**  
 Study of vertebrate histology with emphasis on the four primary tissues (epithelium, connective, muscle, and nerve). Laboratory work consists primarily of detailed microscopic study and drawings of tissues from prepared slides. Two 2-hour laboratory periods per week.
- BIOL 6500 Cell Biology** 3-3-4  
**Prerequisite: Admission into the graduate program or permission of the instructor.**  
 The organization and function of cellular structures in animal, plant, and microbial systems. Emphasis on the molecular basis of metabolism, transport, mobility, nerve conduction, and the cell cycle.
- BIOL 6510 Virology** 3-0-3  
**Prerequisite: Admission into the graduate program or permission of the instructor.**  
 An introduction to viruses and other non-cellular infectious agents. Topics include the structure and composition of these agents, their replication, effects on their hosts, and host responses. Methods for studying these agents, their origin and evolution, and their uses in biotechnology will also be discussed.
- BIOL 6550 Immunology** 3-3-4  
**Prerequisite: Admission into the graduate program or permission of the instructor.**  
 Basic concepts of immunology, including antigen and antibody structure, the generation of diversity, the nature of T cell and B cell receptors, cellular cooperation, and the down regulation of immune responses.
- BIOL 6580 Molecular Genetics** 3-3-4  
**Prerequisite: Admission into the graduate program or permission of the instructor.**  
 The study of the molecular nature of eukaryotic genomes, with emphasis on biotechnology. The lecture will focus on using modern molecular genetic techniques as a means to understand complex eukaryotic genomes. Emphasis will be placed on reading current, relevant scientific literature. The laboratory will involve hands-on experience in which the student will learn the latest technology of molecular genetic analysis and manipulation.
- BIOL 6600 Evolution** 3-0-3  
**Prerequisite: Admission into the graduate program or permission of the instructor.**  
 Study of the theoretical aspects and the patterns and processes of micro- and macro-evolutionary change.
- BIOL 6650 Animal Behavior** 3-3-4  
**Prerequisite: Admission into the graduate program or permission of the instructor.**  
 Introduction to the major concepts of causation, development, evolution, and ecology of animal behavior, emphasizing the behavior of social animals.

- BIOL 6700 Limnology** 3-3-4  
**Prerequisite: Admission into the graduate program or permission of the instructor.** A study of the physical, chemical, and biological aspects of fresh waters.
- BIOL 6750 Population Biology** 3-0-3  
**Prerequisite: Admission into the graduate program or permission of the instructor.** A review of the theory and applications of population biology, including single-species population growth models (exponential, geometric, logistic, life tables, state and age-structured matrix models, metapopulation models), population genetics models, and multi-species interaction models (competition, predator-prey, succession, and parasite-host). Integrated computer exercises will allow students to manipulate model parameters and understand model predictions and dynamics.
- BIOL 6950 Directed Study** 0-12-4  
**Prerequisite: Admission into the graduate program or permission of the instructor.** Limited to selected students with approval of instructor and department head. A specific problem to include supervised investigation and a report in format of biological journals.
- BIOL 7000 Introduction to Research** 0-2-1  
**Prerequisite: Acceptance into the graduate program in biology.** An introduction to the scientific method, primary research literature, methods of literature review, and scientific writing. A research prospectus is required by the end of the semester. This course is to be taken during the student's first semester in the graduate program.
- BIOL 7010 Special Topics in Ecology and Evolution** 2-0-2  
**Prerequisite: Acceptance into the graduate program in biology or permission of the instructor.** In-depth analysis of a current issue in ecology and evolution requiring student presentations and extensive background reading. The specific topic with ecology and evolution will change each time the course is offered. The course may be taken one additional time for credit, with the permission of the instructor.
- BIOL 7900 Graduate Seminar** 0-3-1  
**Prerequisite: Acceptance into the graduate program in biology.** Discussion and reports of current topics in biology and related sciences. Students are expected to demonstrate comprehension of topics and communication skills, both oral and written. Students must take this course twice for credit. This course may be repeated for a maximum of six times for credit.
- BIOL 8999 Thesis** [0]-[3-18]-[1-6]  
**Prerequisites: Completion of BIOL 7000 and permission of the student's major advisor.** Students are required to enroll in thesis hours when doing original research towards the thesis. Students must complete a minimum of six hours of BIOL 8999 prior to defense of the thesis. BIOL 8999 may be repeated for credit.

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## CHEM: CHEMISTRY

- CHEM 5000 Workshop for Teachers** 3-0-3  
A workshop for middle school and high school chemistry teachers, designed to improve subject mastery. Content and level of presentation will be designed to broaden the participants' background in chemistry and will be related to topics taught in middle and high school chemistry classes.
- CHEM 5320 Environmental Chemistry** 2-6-4  
**Prerequisites:** CHEM 1211, CHEM 1211L or 1211HL, CHEM 1212, CHEM 1212L, CHEM 3401, and CHEM 3402. Development of a general understanding of how microscopic properties of atoms and molecules can affect macroscopic changes in the environment. Basic chemical concepts will be applied to complex environmental processes, with emphasis on current environmental concerns. The course will involve the completion of a significant independent project. Field trips will be required of all students.
- CHEM 5801 Physical Chemistry I** 3-3-4  
**Prerequisites:** CHEM 3402, MATH 2262, and PHYS 2212K with a grade of "C" or better. A theoretical and mathematical treatment of the fundamental theories and laws of chemistry with an emphasis on thermodynamics. Experimental investigations will supplement the study of phase diagrams, solution calorimetry, bomb calorimetry, thermodynamic modeling and additional solid, liquid, and gas phase energy transfer studies. Permission for graduate credit must be arranged with the instructor prior to enrolling in the course and will involve the completion of a significant project.
- CHEM 5802 Physical Chemistry II** 3-3-4  
**Prerequisite:** CHEM 5801. A theoretical and mathematical treatment of the fundamental theories and laws of chemistry with an emphasis on quantum mechanics, kinetics, and statistical mechanics. Experimental investigations will supplement the study of quantum mechanics, kinetics, and statistical mechanics as applied to systems of interest to chemists. Permission for graduate credit must be arranged with the instructor prior to enrolling in the course and will involve the completion of a significant project.
- CHEM 6420 Physical Organic Chemistry** 3-0-3  
**Prerequisites:** CHEM 3402, CHEM 3802. A study of the methods used to elucidate organic reaction mechanisms. Topics covered include: reaction kinetics, isotope effects; linear free energy relationships; general acid and base catalysis and the acidity functions; reactive intermediates including free radicals, carbenes, carbanions, and carbocations; symmetry controlled reactions; photochemistry. Permission for graduate credit must be arranged with the instructor prior to enrolling in the course and will involve the completion of a significant project.
- CHEM 6810 Computational Chemistry** 1-3-2  
**Prerequisites:** CHEM 3802 with a grade of "C" or better. Computational and modeling software will be introduced through projects involving systems in physical chemistry and spectroscopy as well as organic chemistry, inorganic chemistry, and biochemistry. Computational predictions will be correlated with laboratory experimental results, either from literature sources or from laboratory work done by the student. Permission for graduate credit must be arranged with the instructor prior to enrolling in the course and will involve the completion of a significant project.

## CIED: CURRICULUM AND INSTRUCTION

- CIED 7060 Curriculum, Instruction, and Technology Integration** 3-0-3  
An exploration of curriculum issues and trends, curriculum development, integration of technology into the curriculum, implementation of innovative instructional techniques, and legal/ethical issues across content areas and grade levels.
- CIED 7440 Teaching and Curriculum in Higher Education** 3-0-3  
Design, development, and implementation of postsecondary instruction, with an emphasis on practical teaching strategies, curriculum and course development, implementation of innovative instructional technologies, and integration of technology.
- CIED 9100 Curriculum and Instructional Systems** 3-0-3  
Study of concepts, theories, and trends for curriculum, instructional systems, and the change process. Includes a current review of related literature and reflective analysis of practice.
- CIED 9200 Curricular and Instructional Needs Assessment** 3-0-3  
**Prerequisite: CIED 9100.** Assessment of curricular and instructional needs in educational organizations and agencies through a study of relationships among models of learning, learner characteristics, learning environments, and society.
- CIED 9300 Curricular and Instructional Needs-Based Proposal Development** 3-0-3  
**Prerequisite: CIED 9200.** Design and development of a proposal for an innovative curriculum and instruction project based on needs.
- CIED 9400 Curricular and Instructional Design and Development** 3-0-3  
**Prerequisite: CIED 9300.** Planning for the implementation and evaluation of a curriculum and instruction innovation in an educational setting. Includes design, development, and evaluation of project materials.
- CIED 9500 Curriculum and Instruction Implementation and Evaluation** 3-0-3  
**Prerequisite: CIED 9400.** Field implementation and evaluation of the innovative curriculum and instruction project
- CIED 9600 Dissertation Topic Conceptualization** 3-0-3  
**Prerequisite: Completion of major courses and approval of advisor.** Seminar for the development of the dissertation topic.
- CIED 9900 Special Topics in Curriculum and Instruction** 1-0-1 to 3-0-3  
Advanced study of specific contemporary issues in curriculum and instruction.  
Course may be repeated under different topics.
- CIED 9999 Dissertation in Curriculum and Instruction** 1 to 3 hours credit  
**Prerequisites: Completion of major courses and approval of advisor.** Development and defense of the dissertation proposal and the dissertation. Must be taken each fall and spring semester until the dissertation is completed. The number of hours taken per term must be approved by the dissertation chair. A minimum of 9 hours must be completed.

## COMD: COMMUNICATION DISORDERS

- COMD 5010 Language Disorders in Young Children** 3-0-3  
**Prerequisites: Completion of undergraduate CD course sequence.** An advanced study of the nature and treatment of language disorders in young children through age 5. Focus is placed on the role of the communication environment and intervention planning and implementation. This course may be taken by non-CD majors with the addition of a lab component.
- COMD 5020 Diagnostics (lab arranged)** 3-1-3  
**Prerequisites: Completion of undergraduate CD course sequence.** An in-depth study of the evaluation and assessment processes for communication disorders. Content encompasses appraisal planning, interviewing, ecological observation, instrumentation, informal and standardized procedures appropriate for determination of eligibility and program planning.

- COMD 5030 Phonological Disorders** 3-0-3  
**Prerequisites:** Completion of undergraduate CD course sequence. Advanced study of assessment and treatment of speech sound disorders. Emphasis placed on motor based as well as cognitive-linguistic based analyses and treatment strategies.
- COMD 5040 Fluency Disorders** 3-0-3  
**Prerequisites:** COMD 2999 and completion of undergraduate CD course sequence. Advanced course in differential diagnosis and treatment of stuttering in adults and children. Additional topics include cluttering and stuttering behaviors associated with acquired neuropathies.
- COMD 5050 Beginning Practicum** 1-2-2  
**Prerequisites:** Completion of undergraduate CD course sequence. A supervised experience in a university or community-based setting requiring application of assessment and treatment procedures for individuals primarily with mild to moderate articulation and language disorders. This course will include a weekly seminar on topics related to the profession.
- COMD 5060 Language Disorders of School Age Children** 3-0-3  
**Prerequisites:** COMD 2999 and COMD 5010. A continuation of the study of language disorders with focus on children from elementary school through adolescence. Topics include advanced language development, school curriculum, impact of communicative and linguistic deficiencies on academic progress, collaborative models of intervention, narratives and discourse analysis. May be taken by non majors with a lab component.
- COMD 5070 Traumatic Brain Injury, Dementia, and Progressive Neurological Disorders** 3-0-3  
**Prerequisites:** COMD 5030. Application of diagnostic and therapeutic principles related to persons with traumatic brain injury, dementia, and progressive neurological disorders.
- COMD 5080 Dysphagia and Motor Speech Disorders** 3-0-3  
 A study of diagnostic and therapeutic principles related dysphagia and motor speech disorders.
- COMD 5090 Aural Habilitation/Rehabilitation** 0-3-3  
**Prerequisite:** COMD 2999. The study of hearing habilitation and rehabilitation methods, materials and amplification/assistive devices for children and adults with hearing impairment.
- COMD 5100 Intermediate Practicum** 1-4-3  
**Prerequisites:** COMD 2999, COMD 5050, and Grade Point Average of 3.0. A supervised experience in a university, community, or home-based setting requiring application of assessment and treatment procedures to individuals with mild to moderate articulation, language, fluency, voice, and hearing communication disorders. This course will include a weekly seminar on topics related to the profession.
- COMD 5110 Science and Research in Communication Disorders** 3-0-3  
 Advanced theoretical, statistical, and applied experimental designs, including implementation for single-subject and group design in communication disorders.
- COMD 5120 Aphasia and Other Neurogenic Disorders** 3-0-3  
**Prerequisites:** COMD 2999. A study of the diagnostic and therapeutic principles related to aphasia, TBI, and progressive neurological communication disorders.
- COMD 5130 Oro-Facial/ Syndrome Disorders** 3-0-3  
**Prerequisites:** COMD 5080. Advanced study of communication disorders associated with oral-facial anomalies. Specific emphasis on cleft palate/cleft lip and various syndromes or disorders in which oral-facial anomalies are present.
- COMD 5140 Advanced Practicum** 1-4-3  
**Prerequisites:** COMD 5100 and Grade Point Average of 3.0. A supervised experience in a university, community, or home-based setting with emphasis on test administration, scoring, and interpretation for client services. Treatment of moderate to severe articulation, language, fluency, voice, hearing, and neurogenic communication disorders is emphasized. Weekly student seminars centered on presentations of diagnostic reports/results and proposed intervention strategies are included in this course.

- COMD 5150 Advanced Audiology** 3-0-3  
Advanced study of audiometric diagnostic procedures and interpretation. Students will participate in a variety of experiences designed to provide a working knowledge of the audiometric test battery.
- COMD 5160 Voice Disorders** 3-0-3  
A theoretical and applied study of the diagnosis and treatment of vocal disorders.
- COMD 5170 Issues and Trends in Communication Disorders** 2-0-2  
Addresses current professional issues in speech-language pathology and audiology which affect service delivery including the code of ethics of the profession addressed in light of changing social, economic and political arenas.
- COMD 5180 Cultural and Dialectical Issues in Communication Disorders** 2-0-2  
**Prerequisites:** COMD 5010, COMD 5060. Seminar on the interrelation of sociological variables and linguistic performance with special emphasis on communication differences and disorders among culturally and linguistically diverse populations.
- COMD 5190 Applied Practicum in the Public School** 0-0-9  
**Prerequisites:** 3.0 GPA, minimum of 100 client contact hours, completion of all concurrent enrollment in all graduate course work and consent of instructor. Supervised practicum consisting of full-time off-campus placement in public schools under the direct supervision of a speech-language pathologist holding the certificate of clinical competence. Students participate in client management, diagnosis, scheduling, staffing, and other activities specific to the setting. May be repeated with instructor's consent.
- COMD 5200 Augmentative/Alternative Communication** 3-0-3  
Study of communication options, techniques, and strategies for persons with severe communication disorders resulting from a variety of conditions.
- COMD 5210 Externship in Communication Disorders** 0-0-9  
**Prerequisites:** 3.0 GPA; minimum of 100 client contact hours; completion of all graduate course work; an on-site interview and consent of instructor. Supervised practicum consisting of full-time, off-campus placement in clinical settings such as hospitals, clinics, rehabilitation centers and private practice sites under the direct supervision of a speech-language pathologist holding the certificate of clinical competence. Students participate in supervised client management, diagnosis, staffings, scheduling and other activities specific to the setting.
- COMD 5220 Directed Study in Communication Disorders** 3-0-3  
**Prerequisites:** with prior approval of instructor, advisor and Department Head. This course enables the student to explore in depth a topic relevant to his/her special interest in communication disorders. This course may be repeated.
- COMD 5230 Thesis** 1-0-1 to 3-0-3  
**Prerequisites:** RSCH 7100, COMD 5170. Research project resulting in the completion of a thesis.
- COMD 5450 Auditory and Oral Methods for Teachers** 3-0-3  
This course covers application of diagnostic and therapeutic principles related to the development of oral speech in children with significant loss of auditory acuity.
- COMD 8010 Contemporary Issues and Trends in Communication Disorders** 3-0-3  
A course designed for presentation and discussion of current issues of local, state, and national importance related to the prevention or solution of problems which impact the field of communication disorders.
- COMD 8020 Seminar in Theory and Applied Intervention** 1-0-1  
Seminar presentations regarding in-depth exploration of problems, theories, treatments, and research in specific areas of communication disorders and state of the art interventions based on theoretical conceptualizations. Students will complete 4 one-hour seminars. This course may be repeated for credit when the topic(s) covered is different. Individual topics to be announced with suffix and title.

- COMD 8030 Professional Communication and Collaboration** 3-0-3  
 A seminar designed to help the speech-language pathologist organize programs, prepare and administer budgets, supervise professional personnel and physical plant facilities, and provide in-service training.
- COMD 8080 Thesis** 0-0-6  
 This course is for the development and defense of the thesis prospectus.

### **CRJU: CRIMINAL JUSTICE**

- CRJU 7000 Criminal Justice Administration** 3-0-3  
 An introduction to the administration and organizational structure of criminal justice agencies and the criminal justice system as a whole.
- CRJU 7010 Advanced Comparative Criminal Justice Systems** 3-0-3  
 A seminar on crime, law, and criminal justice systems of major legal systems allowing for cross-cultural comparisons
- CRJU 7100 Seminar in Law Enforcement** 3-0-3  
 A seminar in which administrative issues pertinent to policing are examined. These include ethics, rural policing, and community policing, among others.
- CRJU 7300 Seminar in Criminal Law And Procedure** 3-0-3  
 A seminar in which rapidly changing controversial legal issues which have a major impact on criminal justice are explored.
- CRJU 7350 Seminar in Forensic Investigation** 3-0-3  
 An introduction to special topics in forensic science involving the use of forensic techniques in criminal investigations. This course will examine different areas related to the solving of crimes using forensic techniques currently available to the investigator. As needed, experimental forensic techniques will be discussed. Each student will gain an understanding of how forensic science is an integral part of the criminal justice system.
- CRJU 7370 Ethical and Legal Issues** 3-0-3  
 An introduction to the study of criminal justice ethics as a classical and contemporary discipline. Modern criminal justice codes of ethics and professional standards will be studied and critiqued. Students will be encouraged to examine critical values and moral beliefs and to develop humanistic philosophies. Questions about the ethical spirit and consequences of specific laws or policies and the disparities between these relatively narrow requirements and more generous professional and personal ethics will be addressed.
- CRJU 7411 Applied Statistics and Research in Criminal Justice** 3-0-3  
**Prerequisite: Proficiency in basic statistical methods as demonstrated by undergraduate or graduate course work.** A study of advanced statistical techniques and research methodology used in criminal justice.
- CRJU 7413 Criminal Justice Planning and Evaluation** 3-0-3  
 An analysis of criminal justice program development through planned change and techniques of program evaluation, with emphasis on procedure and design.
- CRJU 7500 Seminar in Criminal Behavior and Personality** 3-0-3  
 An advanced study of specific criminal behavior types emphasizing violent offenders, sexual deviants, the anti-social personality, and the criminally insane.
- CRJU 7510 Advanced Correctional Therapies** 3-0-3  
 Study and practice in the development and application of theoretically based correctional treatment plans.
- CRJU 7600 Advanced Criminological Theory** 3-0-3  
 An intensive overview of each of the major criminological perspectives regarding the etiology of crime.

- CRJU 7610 Seminar in Gang, Group, and Multiple Offender Criminality** 3-0-3  
An intensive study of gang, mob, mass, and other types of group criminality. The course includes an examination of the formulation, evolution, characteristics, and threat of multiple offender violence. Topics include but are not limited to youth gangs, cults, organized crime, mob violence, vigilante groups, and domestic terrorist groups.
- CRJU 7620 Seminar in Criminal Victimization** 3-0-3  
An introduction to the study of crime victims by examining different areas related to crime victims, including identification, research and statistical data used to assess crime victims. A major emphasis of this course will focus on victims' rights legislation and individual responsibility of criminal justice agencies to abide by and provide for special services and programs afforded crime victims. The course will include an outside classroom project that involves each student working with a criminal justice agency, focusing on that agency's role in handling crime victims.
- CRJU 7630 Advanced Crime Prevention** 3-0-3  
Basic concepts of crime prevention theories and techniques. Students will study past and current techniques, programs, and research used to establish crime prevention in today's society. Course requirements include a hands-on creation of a crime prevention program for an existing criminal justice agency, business, or other entity whose use of a crime prevention program is necessary for its success or survival.
- CRJU 7700 Special Topics in Criminal Justice** 3-0-3 to 6-0-6  
A variable topics course that may be taken for 3 to 6 semester hours.
- CRJU 7710 Seminar in Juvenile Justice** 3-0-3  
A seminar on the Juvenile Justice System and major issues related to the administration of juvenile justice. These include administrative issues, legal issues, and issues revolving around theory and rehabilitative goals.
- CRJU 7720 The Media and Criminal Justice** 3-0-3  
An introduction to the portrayal of the criminal justice system through popular media. Students will view films based on true events. Using books or other information on the actual events, students will examine the interaction between the media and criminal justice from varied perspectives.
- CRJU 7730 Great Works in Criminal Justice** 3-0-3  
An introduction to the study of historical and contemporary writings in criminal justice. Students will read and discuss original words from the writings comprising the intellectual history that has shaped criminal justice and original full-length works of unusual merit.
- CRJU 7900 Directed Study In Criminal Justice** 0-3-1 to 0-18-6  
**May be taken for a maximum of 6 credit hours. Graded "Satisfactory" or "Unsatisfactory."** The study plan must be determined in advance and approved by the Coordinator of the Criminal Justice Graduate Program as well as the instructor of record. Independent study or research under the guidance of a criminal justice graduate faculty member.
- CRJU 7990 Area Paper** 3 hours credit  
**Graded "Satisfactory" or "Unsatisfactory."** The student must be registered for CRJU 7990 in the term in which the degree is earned. For students electing the non-thesis option and writing an Area Paper as per established guidelines.
- CRJU 7999 Thesis** 0-3-1 to 0-18-6  
The student must be registered for CRJU 7999 in the term in which the degree is earned. For students developing and writing a thesis and as recommended and approved by the student's thesis advisor. Must be taken for a total of 6 hours.



## CS: COMPUTERSCIENCE

- CS 6140 Data Communications and Computer Networks** 3-0-3  
**Prerequisite:** CS 3410. Basic concepts of data communications and computer networks architectures: including OSI and TCP/IP models, packet switching, local area and high speed networks. Error control, routing, and transmission media.
- CS 6321 Software Engineering I** 3-0-3  
**Prerequisite:** CS 3410. Early stages of the software-development process, with emphasis upon analysis and specification. Also, life-cycle definition, software project management, the computer as a system component, and object-oriented approaches. CASE tools will be used as appropriate.
- CS 6322 Software Engineering II** 3-0-3  
**Prerequisite:** CS 3410 (note that CS 4321/6321 is not a prerequisite). The later stages of the software-development process with emphasis upon design, implementation, verification/ validation, and maintenance. Also, human factors, object-oriented techniques, reliability, and quality-assurance issues.
- CS 6330 Theory of Programming Languages** 3-0-3  
**Prerequisite:** CS 3410 or consent of instructor. Formal description of programming languages, standard and advanced features of modern programming languages, complexity.
- CS 6335 Principles of Compiler Design** 3-0-3  
**Prerequisites:** CS 3102 and CS 3410. Introduction to programming language structure, lexical analysis, syntax analysis, code generation, and optimization. A large programming project will be required.
- CS 6340 Systems Programming** 3-0-3  
**Prerequisite:** CS 3410. Implementation of concepts pertaining to the UNIX environment: process control and interprocess communication, job control, file and directory structures, and client/server processes.
- CS 6500 Foundations of Computer Science** 3-0-3  
**Prerequisites:** CS 2620 and CS 3410. The course covers concepts pertaining to regular expressions, finite state machines, regular languages, regular grammars, non regular languages, decidability, context-free grammars, and Turing machines.
- CS 6720 Database Design** 3-0-3  
**Prerequisite:** CS 3410. Examines the logical organization of databases: the entity-relationship model; the hierarchical model, network, and relational models. Hardware characteristics; file organization and evaluation. Functional dependencies and normal forms. Query optimization, concurrency control, and distributed database systems.
- CS 6820 Artificial Intelligence** 3-0-3  
**Prerequisites:** CS 2620 and CS 3410. Definition of artificial intelligence, Common Lisp, logic programming, search techniques, knowledge representation including schemas and scripts, ART-enterprise as an expert system, and principles of expert systems.
- CS 6825 Neural Networks** 3-0-3  
**Prerequisites:** MATH 2150 and MATH 2262. Concepts pertaining to neural networks including: definition of neural intelligence, basic neural computational models, learning: supervised and unsupervised, knowledge bases neural networks, back-propagation neural networks, radial basis neural networks.
- CS 6830 Computer Graphics** 3-0-3  
**Prerequisites:** CS 3410 and MATH 2150. A survey of graphics systems and graphics programming. Topics include output primitives, transformations and viewing, modeling, user interfaces, and interactive methods. Both 2-D and 3-D concepts are discussed.

## ECED: EARLY CHILDHOOD EDUCATION

- ECED 5010 Student Teaching – Inclusive ECED** 0-20-5  
**Prerequisite:** Completion of all undergraduate coursework with a grade of “C” or higher and requirements to student teach as listed in the University’s Undergraduate catalog. **Corequisite:** ECED 5020. Guided professional experience in an elementary grade (P-5). Student teachers practice teaching and managing a classroom under the supervision of a full-time master teacher and university supervisor in an off-campus setting. The experience includes observations, participation, teaching, and other activities, which make a direct contribution to an achievement of basic concepts, skills, and principles in the teaching-learning process. A minimum of 20 contact hours per week is required in the school for the entire semester.
- ECED 5020 Seminar – Inclusive ECED** 1-0-1  
**Corequisite:** ECED 5010. This seminar is a forum for discussion and exchange of ideas relating to the responsibilities of professional ethical practices. Topics include direct intervention issues, advocacy, collaboration, diversity and any others that arise during student teaching.
- ECED 7210 Assessment and Action Research in Early Childhood Education** 3-0-3  
A study of the role of assessment in educational change. Students examine alternative evaluation strategies and action research processes in early childhood education. Emphasis is placed on the teacher as researcher and on strategies for data collection, data analysis, and interpretation. On-line resources and computer technology to support the learning process will be incorporated.
- ECED 7220 Early Childhood Environments** 2-2-3  
Principles for planning and implementing appropriate programs and learning environments for young children are presented. Program alternatives and models in early childhood education are presented. The integration of computer technology in supporting appropriate programs for young children will be included. Students will plan and implement changes in a classroom environment to address the principles examined in the course.
- ECED 7320 Curriculum and Instructional Strategies P-5** 3-0-3  
Review of the content areas in the early childhood curriculum. Emphasis will be placed on implication of effective strategies that utilize a variety of resources and technologies to enhance teaching and learning within diverse environments.
- ECED 7330 Issues and Trends in Early Childhood Education** 3-0-3  
Examination of research, trends, and problems in early childhood education, with special reference to professional ethics, mentoring, and various delivery systems for early childhood education programs. Focus is on the impact of relevant federal, state, or local public education issues and trends.
- ECED 7410 The Social Sciences in Early Childhood Education** 3-0-3  
A study of the influence of the social sciences in early childhood education. The content, curriculum, and implementation of the social studies program are examined. The application of interdisciplinary knowledge from related fields such as sociology, psychology, health services, special education, history, philosophy, and anthropology to social learning is explored. Relevant computer software to support the social science curriculum in early childhood will be included. The student will plan and implement curricular improvement based on theory and practice examined in the course.

- ECED 7420 Child, Family, and Society** 2-0-2  
 Examination of the research and dominant theories of human development and sociocultural development within the context of the family, community, and society. Strategies for collaboration between home and school will be emphasized, and interagency cooperation within the community will be examined in relation to the benefits for young children and their families. The student will investigate a variety of community agencies serving children and families to enhance and apply an understanding of community resources which support the education of young children.
- ECED 7430 Integrating Math, Science, and Technology in Early Childhood Education** 3-0-3  
 Explores the integration of curriculum in math, science, and technology. Special emphasis is placed on the utilization of inquiry methods for enhancing children's ability to analyze, to evaluate, and to make inferences from oral, written, and visual materials. Methodology for developing the skills of problem solving, decision making, and critical and creative thinking skills is explored. The use of computer technology to enhance the math, science, and technology curriculum will be included. The student will plan and implement curricular improvement based on theory and practice examined in the course.
- ECED 7540 Children, Play, and Development** 3-0-3  
 Focus on the definitions and the characteristics of play as a basis for understanding cultural and gender differences and similarities in children's play, the multiple stages of play by developmental age, play in special populations, and the relationship of play to intellectual, social, physical, and emotional development. Field based observations and experiences with multiple ages of children as they engage in play is included.
- ECED 7550 The Integrated Early Childhood Curriculum** 3-0-3  
 In depth investigation of developmentally appropriate ECE integrated curricula which employ a holistic philosophy of ECE. Principles and processes of integrated curriculum development will be examined.
- ECED 8200 Theoretical Models in Early Childhood Education** 3-0-3  
**Prerequisite: RSCH 8000.** An examination of the major theoretical models that influence early childhood education. The contributions to early childhood education of various perspectives will be examined, particularly constructivism, sociolinguistics, and psycholinguistics.
- ECED 8230 Mentoring and Advocacy in Early Childhood Education** 2-0-2  
 An overview of the knowledge, understandings, and skills necessary to assume mentoring and advocacy roles in various capacities in early childhood education. Emphasis is given to the development of early childhood advocates who establish programs and policy that significantly and positively impact the young children, families, and communities with whom they work. Professional ethics and the development of mentoring strategies are integral parts of this course.
- ECED 8300 Area Studies in ECE Curriculum and Instruction** 3-0-3  
 A critical analysis of the current status of innovations and trends for curriculum development in various subject fields. Patterns of organization and techniques for curriculum development are examined and evaluated. Recognition is given to the impact of a multidimensional curriculum on planning, teaching, and learning.
- ECED 8330 Design and Evaluation of Quality Programs in ECE** 3-0-3  
 A study of the issues related to designing and evaluating quality programs in early childhood education. Related research is examined regarding programs and educational environments for children from diverse cultural and socio-economic backgrounds as well as differing ages and developmental levels, including children with special needs.

- ECED 8410 Special Topic: Early Childhood Education Today** 3-0-3  
An interdisciplinary approach to the study of the historical, philosophical, sociological, and anthropological perspectives and influences on contemporary early childhood education.
- ECED 8420 Special Topic: International Perspectives in ECE** 3-0-3  
Directed readings in international perspectives in early childhood education. Emphasis is placed on the international impact of contemporary early childhood education and research on young children in early childhood settings and programs throughout the world.
- ECED 8998 Applied Research Project** 2-0-2  
Supervised development and investigation of a research problem in early childhood education.

### **EDUC: EDUCATION**

- EDUC 8010 Reflective Teaching Practices Seminar** 3-0-3  
**Graded “Satisfactory” or “Unsatisfactory.”** Introductory course for a six-course sequence of core classes for the Educational Specialist degree. National Board for Professional Teaching Standards are used for the candidates’ self-assessment of professional goals that are based upon an understanding and application of a master teacher as leader. This course provides the basis for an individual program of study by identifying appropriate guided electives.
- EDUC 8020 Using Assessment and Research Data** 3-0-3  
**Prerequisite: EDUC 8010.** Techniques for establishing reliable and valid data sources for student, classroom, and school-improvement decisions. Students learn how to utilize technology tools for educational management.
- EDUC 8030 Developing and Leading a Community of Diverse Learners** 3-0-3  
**Prerequisite: EDUC 8010.** Examination of the impact of cultural, multicultural, diversity, and exceptionality issues on adults’ and children’s relationships, communication, and educational practices in American schools. Appropriate verbal and nonverbal communication techniques are addressed.
- EDUC 8040 Strategic Planning for School Reform** 3-0-3  
**Prerequisite: EDUC 8010.** Study of major theories and practices in the development and evaluation of school-based programs, including curricular, co-curricular, and staff development initiatives for the improvement of student learning.
- EDUC 8050 Action Research** 3-0-3  
**Prerequisite: EDUC 8010.** Practical action research utilized for the purpose of school reform and student achievement; an examination of the reflective roles of the classroom teacher and how reflection may lead to school improvement.
- EDUC 8880 Capstone Seminar** 3-0-3  
**Prerequisites: EDUC 8010, EDUC 8020, EDUC 8030, EDUC 8040, EDUC 8050.** Capstone course resulting in a portfolio demonstrating candidates’ analysis of teaching, leadership, and mentoring. Analysis is based on the National Board Standards, educational specialist degree goals, professional development program plan designed in EDUC 8010, and candidates’ school-improvement plans.

Most credit notations on the far right are in the pattern 3-0-3. The first number is the number of lecture hours (or equivalent) each week; the second number is the number of laboratory hours (or equivalent) each week; the third number, **in bold**, is the number of semester hours credit.

## ENGL: ENGLISH

- ENGL 6000 Graduate Option** 3-0-3  
An English Department course, numbered 4000 or above, which may be taken at the graduate level with appropriate adjustments agreed on by the student and the professor.
- ENGL 6000 Studies in Composition Theory** 3-0-3  
**Prerequisite or co-requisite: ENGL 3060 or ENGL 3080, depending upon major track.**  
A study of the theory and practice of composition pedagogy, including crafting assignments; planning, drafting, and revising texts; and evaluating student writing.
- ENGL 7000 Approaches to Graduate Study** 3-0-3  
An introduction to the fields and methods of research and writing in graduate literary study.
- ENGL 7010 Approaches to Critical Theory** 3-0-3  
An introduction to the role and function of literary criticism in the context of literary studies.
- ENGL 7110 Studies in British Literature to 1500** 3-0-3  
A focused survey in the area of British literature to 1500, with special emphasis on themes, genres, and/or figures. Attention will be given to cultural background and/or critical perspective.
- ENGL 7120 Studies in British Literature 1500-1660** 3-0-3  
A focused survey in the area of British literature from 1500-1660, with special emphasis on themes, genres, and/or figures. Attention will be given to cultural background and/or critical perspective.
- ENGL 7130 Studies in British Literature 1660-1800** 3-0-3  
A focused survey in the area of British literature from 1660-1800, with special emphasis on themes, genres, and/or figures. Attention will be given to cultural background and/or critical perspective.
- ENGL 7140 Studies in British Romantic Literature** 3-0-3  
A focused survey in the area of Romantic literature, with special emphasis on themes, genres, and/or figures. Attention will be given to cultural background and/or critical perspective.
- ENGL 7145 Studies in Victorian Literature** 3-0-3  
A focused survey in the area of Victorian literature, with special emphasis on themes, genres, and/or figures. Attention will be given to cultural background and/or critical perspective.
- ENGL 7150 Studies in Modern and Contemporary British Literature** 3-0-3  
A focused survey in the area of modern and contemporary literature, with special emphasis on themes, genres, and/or figures. Attention will be given to cultural background and/or critical perspective.
- ENGL 7210 Studies in American Literature to 1800** 3-0-3  
A focused survey in the area of American literature to 1800, with special emphasis on themes, genres, and/or figures. Attention will be given to cultural background and/or critical perspective.
- ENGL 7220 Studies in American Literature 1800-1865** 3-0-3  
A focused survey in the area of American literature from 1800 to 1865, with special emphasis on themes, genres, and/or figures. Attention will be given to cultural background and/or critical perspective.
- ENGL 7230 Studies in American Literature 1865-1914** 3-0-3  
A focused survey in the area of American literature from 1865 to 1900, with special emphasis on themes, genres, and/or figures. Attention will be given to cultural background and/or critical perspective.
- ENGL 7240 Studies in Modern and Contemporary American Literature** 3-0-3  
A focused survey in the area of modern and contemporary American literature, with special emphasis on themes, genres, and/or figures. Attention will be given to cultural background and/or critical perspective.

<b>ENGL 7300 Studies in Special Topics</b>	3-0-3
A focused survey in a selected topic, with special emphasis on themes, genres, and/or figures. Attention will be given to cultural background and/or critical perspective.	
<b>ENGL 7320 Studies in Genre</b>	3-0-3
A focused survey in genre studies, with special emphasis on themes, genres, and/or figures. Attention will be given to cultural background and/or critical perspective.	
<b>ENGL 7600 Studies in Rhetoric and Composition</b>	3-0-3
A focused survey in the area of rhetoric and/or composition theory.	
<b>ENGL 8110 Seminar in British Literature to 1500</b>	3-0-3
A seminar in the area of British literature to 1500.	
<b>ENGL 8120 Seminar in British Literature 1500-1660</b>	3-0-3
A seminar in the area of British literature from 1500-1660.	
<b>ENGL 8130 Seminar in British Literature 1660-1800</b>	3-0-3
A seminar in the area of British literature from 1660-1800.	
<b>ENGL 8140 Seminar in British Romantic Literature</b>	3-0-3
A seminar in the area of Romantic literature.	
<b>ENGL 8145 Seminar in Victorian Literature</b>	3-0-3
A seminar in the area of Victorian literature.	
<b>ENGL 8150 Seminar in Modern and Contemporary British Literature</b>	3-0-3
A seminar in the area of modern and contemporary literature.	
<b>ENGL 8210 Seminar in American Literature to 1800</b>	3-0-3
A seminar in the area of American literature to 1800.	
<b>ENGL 8220 Seminar in American Literature 1800-1865</b>	3-0-3
A seminar in the area of American literature from 1800 to 1865.	
<b>ENGL 8230 Seminar in American Literature 1865-1914</b>	3-0-3
A seminar in the area of American literature from 1865 to 1900.	
<b>ENGL 8240 Seminar in Modern and Contemporary American Literature</b>	3-0-3
A seminar in the area of modern and contemporary American literature.	
<b>ENGL 8300 Seminar in Special Topics</b>	3-0-3
A seminar within the area of language and/or literature.	
<b>ENGL 8320 Seminar in Genre</b>	3-0-3
A seminar in genre studies.	
<b>ENGL 8600 Seminar in Rhetoric and Composition</b>	3-0-3
A seminar in the area of rhetoric and/or composition theory.	
<b>ENGL 8690 Workshop in Rhetoric and Composition</b>	1-0-1 to 6-0-6
Writing-intensive and leadership course for teachers that promotes writing-to-learn across subject areas and grade levels. Participants write for personal and professional reasons, research composition theory, and design a lesson based on their experience. The four-week program provides nine Staff Development Units or six hours of master's degree credit. The course requires formal application and interview into the South Georgia Writing Project. Graduates from this program also participate in at least two programs, either through their school or the South Georgia Writing Project over the course of the following year.	
<b>ENGL 8700 Directed Study</b>	3-0-3
Research in selected areas of language and literature.	
<b>ENGL 8800 Seminar for Teaching Assistants</b>	1-0-1
A seminar for graduate students currently teaching composition courses.	
<b>ENGL 8999 Thesis</b>	3-0-3 to 6-0-6
Individualized study and research in preparation for a work of fifty or more pages demonstrating competent and substantial research coupled with an innovative approach to the subject matter. May be repeated for credit.	

## FLED: FOREIGN LANGUAGE EDUCATION

- FLED 6800 Methods and Materials for Teaching ESOL** 3-0-3  
Methods of teaching English at both the elementary-, middle-, and high school-levels to students whose first language is not English. The course content includes theories of second language acquisition, instructional strategies and materials, methods of evaluating proficiency and progress, curriculum, and professional organizations and resources.
- FLED 7100 Professional Development Seminar I** 2-0-2  
Through interaction with peers and education professionals, students perform self-assessment, determine areas of skill and knowledge in need of improvement, and design an effective career growth and development plan, as a preliminary step in expanding and modifying their personal teaching strategies.
- FLED 7500 Theory and Practice in Second Language Acquisition** 2-0-2  
Discussion, analysis, and practice of the various theories and models of second-language acquisition.
- FLED 7600 Research and Design** 2-0-2  
Research curriculum design in foreign language education with emphasis contemporary issues.
- FLED 7800 Professional Development Seminar II** 2-0-2  
A capstone experience requiring students to reflect upon their teaching experiences through interactions with peers, secondary education professionals and other educators in their content area. The preparation and presentation of a portfolio reflecting their student teaching experience is required.

## FREN: FRENCH

- FREN 5410 Francophone Literature** 3-0-3  
Selected works of 20th-century Francophone writers from the French-speaking community outside of France, especially the Caribbean, Africa, and Quebec.
- FREN 5610 Women Writers of 17th-Century France** 3-0-3  
Selected literary works of major women writers of 17th-century France.
- FREN 5630 Topics in French Language or Literature** 1-0-1  
Intensive study to improve the student's ability in a particular area of French language or Francophone literature. This course requires independent work of the student and may be repeated with different topics for a total of 3 hours.
- FREN 6400 French Phonetics and Advanced Conversation** 3-0-3  
Study of phonetic principles and their applications.
- FREN 6410 French Composition and Advanced Grammar** 3-0-3  
Advanced study of grammar, practical composition, and refinement of written expression.
- FREN 6420 French Translation: English to French** 3-0-3  
Translation techniques from English to French, including idiomatic expressions and extensive practice in written French.
- FREN 6650 French Literature of the 20th Century** 3-0-3  
Selected major literary works of France, from 1901 to the present.
- FREN 6950 Directed Study** 3-0-3  
Study in an area or topic of Francophone literature or the French language not normally found in established courses offered by the department. The work is done under the supervision of a professor.

## GEOG:GEOGRAPHY

- GEOG 5020 Geoscience Perspectives on Global Climate Change** 1-0-1  
**Also offered as GEOL 5020.** Study of global climate change from the perspective of the geoscientist. Topics include whether or not global climate change is occurring, possible causes of global climate change, climate change in the geologic record, implications of climate change on the human population, and proposed methods and policies designed to limit or reverse processes believed to lead to global climate change.
- GEOG 5050 Computer Cartography and Image Analysis** 2-2-3  
An introduction to digital production of general and thematic maps. Lectures and laboratory exercises cover principles of cartography and remote sensing as well as the manipulation and visualization of spatial data and imagery.
- GEOG 5051 Introduction to Geographic Information Systems** 2-2-3  
An examination of geographic information systems, including methods of capture, storage, analysis, and display of spatially-referenced data. Laboratory exercises provide experience with typical GIS operations and applications.
- GEOG 5052 Advanced Geographic Information Systems** 2-2-3  
Advanced applications of GIS including: overlay analysis, writing short macros for repetitive operations, spatial modeling and technical support of complex land use and natural resource management decision making. Laboratory exercises designed to form a cartographic and software portfolio for students.
- GEOG 5053 Application Issues in Geographic Information Systems** 3-0-3  
Operational and planning issues in GIS. Students will learn which issues need to be considered when proposing and implementing a GIS and will have opportunities to evaluate how a GIS can be used to solve specific planning problems.
- GEOG 5100 Regional Planning and Environmental Management** 3-0-3  
Introduction to planning for economic development, service provision and resource management at scales larger than municipalities with an emphasis on the environmental impacts of planning policy and regulation.
- GEOG 5120 Geosciences Field Trip** 1-8-3  
**Also listed as GEOL 5120. Prerequisite: GEOG 1113K or GEOL 1121K. Student fee required. Offered only during Summer I sessions.** Geology and geography of selected regions studied by readings on the region of interest during the first week, followed by a two-week field trip to points of interest. The interactions among geology, surficial processes, and organisms and how these interactions impact humans will be emphasized. Field trip destination is different each summer.
- GEOG 5150 Meteorology and Climatology** 3-0-3  
A detailed examination of atmospheric motions and climatic controls including, the Earth's radiation and energy balance, air mass dynamics, weather systems, and past and present climates of the Earth.
- GEOG 5200 History of Life** 2-3-3  
**Also listed as GEOL 5200.** Principles of paleontology with emphasis on the history of life including vertebrates. Includes an account of the outstanding forms of life from the beginning of earthtime to the present, and those paleontologically significant groups that are uncommon, different, or extinct today.
- GEOG 5210 An Introduction to Hydrology** 3-2-4  
**Also listed as GEOL 5210.** An introduction to surface and subsurface hydrology, examining components of the hydrologic cycle. Topics include local and global water balance, precipitation, interception and infiltration, runoff, stream flow, water storage, and groundwater. This course makes use of some mathematical equations.



- GEOG 5300 An Introduction to Process Geomorphology** 3-3-4  
**Also listed as GEOL 5300.** An introduction to process geomorphology examining landforms and their formative processes. Topics include weathering and slope, fluvial, coastal, aeolian, glacial and periglacial processes, and the application of soils to geomorphology. This course makes use of some mathematical equations. Field trip required.
- GEOG 5310 Physiography of North America** 3-0-3  
 The physiographic description, including the landforms, soils, structural framework, climate, plant and animal geography, natural resources, and the unique environmental problems of each major physiographic province of the United States and Canada, including Alaska, Hawaii, and Puerto Rico.
- GEOG 5320 Geomorphology of Fluvial and Coastal Environments** 3-0-3  
 An examination of processes and landforms in fluvial (river) and coastal environments. Fluvial topics include channel geometry and pattern, characteristics of flow, sediment load, bedforms, and floodplains. Coastal topics include the study of waves and tides, coastal sediment transport, beaches, and the effects of changing sea level. This course makes use of some mathematical equations.
- GEOG 5410 Cultural Geography** 3-0-3  
 A study of the Earth as the home of humankind, emphasizing the spatial and functional complexes of human geography. Topics to be considered are population, settlement form, settling processes, resources, and economic, political, and societal organizations.
- GEOG 5510 Urban Community Planning** 3-0-3  
 Principles and applications of planning for neighborhoods, towns and cities with an emphasis on the United States. Topics covered include: public services, land-use decision making, economic development, growth management and the role of non-government organizations.
- GEOG 5610 Economic Geography** 3-0-3  
 A study of area variations in human economic activities as related to production exchange, and consumption of economic goods and services. Emphasis is placed on location of economic activities and related theories.
- GEOG 5710 Environmental Soil Science** 3-3-4  
**Also listed as GEOL 5710. Prerequisites: CHEM 1211K; GEOG 1113K or GEOL 1121K.** Soil properties, distribution and classification, factors of soil formation, and the relationships among soils, geomorphology, and the environment, stressing analysis and use of soils and soil databases for proper urban, agricultural, and environmental land use.
- GEOG 5810 Introduction to Biogeography** 3-0-3  
**Also offered as BIOL 5810. Prerequisites: Three of the following courses: GEOG 1112, GEOG 1113, BIOL 2010, BIOL 2230, BIOL 2270.** An overview of factors controlling the distribution of plants and animals on the Earth. Topics discussed include ecological and evolutionary processes, geophysical and climatic phenomena, and historical and anthropogenic events that have influenced current distributions.
- GEOG 5910 European Geography** 3-0-3  
 A survey of European geography, with a special emphasis on the European Union. Topic areas covered include physical, economic, political, and cultural geography of Europe.
- GEOG 5920 Geography of the Middle East** 3-0-3  
 A survey of the nations of the Middle East, with a special emphasis on the Arab-Israeli conflict. Topic areas covered include physical, economic, political, and cultural geography of the Middle East.
- GEOG 6700 Field Methods in Environmental Geography** 2-4-4  
 Study of field techniques and field problems in physical geography. Course includes classroom presentations, field projects, field trips, and writing technical reports.

- GEOG 6800 Internship in Environmental Geography** 0-6-3 to 0-12-6  
A supervised, practical experience using physical geography skills in an appropriate organization. Provides the student with an opportunity to apply skills learned during pursuit of environmental geography degree to real world situations. (Graded on an S/U basis).
- GEOG 6900 Special Topics in Geography** 1-0-1 to 4-4-6  
Topic to be assigned by instructor; the course may be repeated more than once if the topics are different.
- GEOG 6990 Directed Study in Geography** 1-0-1 to 4-4-6  
Study in area or subject not normally found in established courses offered by the department; may also allow students to explore in more detail and/or depth an area or subject covered by the department.

## GEOL:GEOLOGY

- GEOL 5010 Environmental Geology** 2-2-3  
The application of basic geologic principles and techniques to problems in land-use planning, resource management, waste disposal, conservation, energy plant sitings, under-and-above-ground construction, subsidence, construction in seismic areas, slope-stability, urban development and other problems resulting from human interaction with the geological habitat.
- GEOL 5020 Geoscience Perspectives on Global Climate Change** 1-0-1  
**Also offered as GEOG 5020.** Study of global climate change from the perspective of the geoscientist. Topics include whether or not global climate change is occurring, possible causes of global climate change, climate change in the geologic record, implications of climate change on the human population, and proposed methods and policies designed to limit or reverse processes believed to lead to global climate change.
- GEOL 5050 Oceanography** 3-0-3  
The physical, chemical, geological, and biological characteristics of the ocean and the interactions between the hydrosphere, lithosphere, atmosphere, and biosphere.
- GEOL 5100 Principles of Mineralogy/Petrology** 2-3-3  
An introduction to mineral and rock identifications, and the study of the genesis, occurrence, and uses of common minerals and rocks. Laboratory consists of identification of common rocks and minerals.
- GEOL 5101 Mineralogy** 3-3-4  
The classification, identification, and crystallography of the principal rock-forming minerals, silicate and non-silicate; and the introduction of the use of the petrographic microscope in the study of the crystallography and identification of minerals.
- GEOL 5102 Petrology and Petrography** 3-3-4  
Genesis, classification, and properties of igneous, metamorphic, and sedimentary rocks. Laboratory includes the use of analytical methods, hand specimens, and thin-section study with the petrographic microscope, and the macroscopic and microscopic properties of important rock types.
- GEOL 5120 Geosciences Field Trip** 1-8-3  
**Also listed as GEOG 5120. Prerequisite: GEOG 1113K or GEOL 1121K. Student fee required. Offered only during Summer I sessions.** Geology and geography of selected regions studied by readings on the region of interest during the first week, followed by a two-week field trip to points of interest. The interactions among geology, surficial processes, and organisms and how these interactions impact humans will be emphasized. Field trip destination is different each summer.

- GEOL 5200 History of Life** 2-3-3  
**Also listed as GEOG 5200.** Principles of paleontology with emphasis on the history of life including vertebrates. Includes an account of the outstanding forms of life from the beginning of earthtime to the present, and those paleontologically significant groups that are uncommon, different, or extinct today.
- GEOL 5210 An Introduction to Hydrology** 3-2-4  
**Also listed as GEOG 5210.** An introduction to surface and subsurface hydrology, examining components of the hydrologic cycle. Topics include local and global water balance, precipitation, interception and infiltration, runoff, stream flow, water storage, and groundwater. This course makes use of some mathematical equations.
- GEOL 5220 Invertebrate Paleontology** 2-2-3  
 Identification, classification, and natural history of major groups of invertebrates preserved as fossils in the geologic record, with special attention to those forms commonly encountered in the southeastern United States. Emphasis in laboratory will include taxonomic affinities and functional morphology. Saturday (optional) field trips will be scheduled to local areas of interest.
- GEOL 5230 Vertebrate Paleontology** 2-2-3  
 Geologic history and evolution of animals with backbones, with coverage of extinct groups such as the Dinosauria.
- GEOL 5250 Micropaleontology** 2-2-3  
 The classification, stratigraphic relationships, and methods of study of microfossils with emphasis on the stratigraphically important groups.
- GEOL 5300 An Introduction to Process Geomorphology** 3-3-4  
**Also listed as GEOG 5300.** An introduction to process geomorphology examining landforms and their formative processes. Topics include weathering and slope, fluvial, coastal, aeolian, glacial and periglacial processes, and the application of soils to geomorphology. This course makes use of some mathematical equations. Field trip required.
- GEOL 5410 Structural Geology** 2-2-3  
 Structural features of the rocks, such as folds, faults, joints, cleavage, and primary structures, including their origin, classification, analyses and economic relationships. A study of tectonic plate motion is included. Laboratory work includes depth and thickness problems, structure sections, and structure contour maps.
- GEOL 5450 Field Methods in Geology** 2-4-4  
 An introduction to the basic tools and techniques used in preparation of topographic and geologic maps, and profiles and cross-sections. Includes uses of plane table, alidade, Brunton compass, and aerial photographs.
- GEOL 5500 Principles of Geochemistry** 3-2-4  
 The application of chemical principles to study of geological and environmental processes. Course emphasis is on understanding processes that influence the chemistry of water, sediment, and soil. Specific topics include aqueous solutions, thermodynamics, mineral-water equilibria, oxidation-reduction reactions, and radiogenic and stable isotopes. Laboratory component of the course is field-based.
- GEOL 5710 Environmental Soil Science** 3-3-4  
**Also listed as GEOG 5710. Prerequisites: CHEM 1211K; GEOG 1113K or GEOL 1121K.** Soil properties, distribution and classification, factors of soil formation, and the relationships among soils, geomorphology, and the environment, stressing analysis and use of soils and soil databases for proper urban, agricultural, and environmental land use.
- GEOL 6110 Principles of Stratigraphy** 3-0-3  
 The interrelationships of stratigraphy, sedimentation, and paleogeography; methods in stratigraphy and correlation.

- GEOL 6900 Special Topics in Geology** 1-0-1 to 4-4-6  
 Topics to be assigned by instructor; may be taken more than once if topics are different; up to a total of 6 credit hours.
- GEOL 6950 Directed Studies in Geology** 1-0-1 to 4-4-6  
 Study of subjects not normally found in established courses offered by this department; may also allow students to explore in more detail and/or depth subjects covered by this department, up to a maximum of 6 credit hours.

### **HIST: HISTORY**

- HIST 5030/5040/5050/5060/5070/5080/5090 Special Topics in History** 3-0-3 each  
 Selected themes of historical and contemporary interest.
- HIST 5120 History of Cuisine and Culture** 3-0-3  
 Overview of food and human society from early human civilization to the modern era. The course will emphasize changes in food production and consumption as well as the development of ethnic and cultural differences in cuisine.
- HIST 5201 The Ancient Near East** 3-0-3  
 The history of Ancient Egypt and Mesopotamia, with emphasis on political structures, social institutions, and cultural developments.
- HIST 5202 Hellenistic Greece and Rome** 3-0-3  
 A study of Mediterranean civilization from the era of Alexander the Great through the fall of the Roman Empire. Greco-Roman contributions to western cultural traditions will be emphasized.
- HIST 5205 Europe in the Age of Louis XIV, 1648-1750** 3-0-3  
 A study of major trends in European history from the Peace of Westphalia to the Enlightenment. Cultural, social, and political achievements of European countries will be stressed.
- HIST 5206 Revolutionary Europe, 1750-1815** 3-0-3  
 A study of major developments in Europe from the Enlightenment through the defeat of Napoleon. The impact of the French Revolution will be emphasized.
- HIST 5207 Europe, 1815-1914** 3-0-3  
 A survey of the leading developments of the period in Europe, including social and nationalistic trends. Emphasis is placed on factors leading to World War I.
- HIST 5208 Europe, 1914-1945** 3-0-3  
 A survey of the lost generation living in a society broken and disillusioned by World War I.
- HIST 5209 Europe Since 1945** 3-0-3  
 A study of European domestic and international affairs since 1945 with emphasis upon the major states.
- HIST 5301 Britain to 1603** 3-0-3  
 History of the British Isles from prehistory to the advent of the Stuarts, with emphasis on political, social, economic, and cultural developments.
- HIST 5302 Britain Since 1603** 3-0-3  
 History of the British Isles from 1603 to the present, with emphasis on political, imperial, social, and economic developments.
- HIST 5303 English Constitutional History** 3-0-3  
 A study of the development of English judicial and governmental institutions from the Anglo-Saxon period to the present.
- HIST 5401 Slavic Europe to 1815** 3-0-3  
 History of Slavic Europe from the early Middle Ages to the end of the Napoleonic Wars. The course will examine the history of Russian and other Slavic peoples, with an emphasis on political, religious, social, and economic developments.

- HIST 5402 Slavic Europe Since 1815** 3-0-3  
History of Slavic Europe from 1815 to the present. The course will examine the history of Russian and other Slavic peoples in the modern period.
- HIST 5500 German History, 1700-1945** 3-0-3  
An in-depth study of German history from the rise of Brandenburg-Prussia to the fall of Nazi Germany. Topic areas include social, political, intellectual, cultural, diplomatic, and gender history.
- HIST 5502 Topics in German History** 3-0-3  
An in-depth study into the history and historiographical and philosophical debates of a particular issue or period in German history. May be repeated for credit.
- HIST 5601 World Military History to 1618** 3-0-3  
Overview of major developments in military history to 1618. The course examines changes in military strategy, technology, and organization, with a focus on comparing systems in different regions and time periods.
- HIST 5602 World Military History Since 1618** 3-0-3  
Overview of major developments in military history since 1618 and the outbreak of the Thirty Years War. The course examines changes in military strategy, technology, and organization, with a focus on comparing systems in different regions and time periods.
- HIST 6100 United States Constitutional History** 3-0-3  
Development of American constitutionalism from its origins in England and colonies to the present time.
- HIST 6101 American Legal History** 3-0-3  
History of American law from colonial times to the present. The course will examine developments in American legal history, especially the relationship between social and legal changes in such areas as criminal law, the law of slavery, and private law, particularly at the state level. The course also examines the development of such legal institutions as the bench and bar and legal education.
- HIST 6105 European Ethnicity in American History** 3-0-3  
A study of European immigration to the United States during the 19th and 20th centuries. The course will examine the reason why Europeans came to American, the problems they faced in the assimilation process, and the contributions they made to the growth of the United States.
- HIST 6198 Colonial North America to 1763** 3-0-3  
A study of major themes in colonial history in North America to 1763. The course will examine such themes as the origins of European colonization, the development of slavery, gender and race relations, religion and society, the imperial struggle for North America, and intercultural relations among Europeans, Africans, and Native Americans.
- HIST 6199 Revolutionary America, 1763-1789** 3-0-3  
A study of the American Revolutionary era from the end of the Seven Years War to the ratification of the Constitution. The course examines political, economic, cultural, social, and military history of the period, with special emphasis on race and gender relations, the origins of American identity, the War for Independence, and the drafting and ratification of the Constitution.
- HIST 6202 United States, 1789-1850** 3-0-3  
A study of United States history from the Washington administration through the Compromise of 1850, focusing on political, cultural, social, and economic developments.
- HIST 6203 United States, 1850-1877** 3-0-3  
A study of United States history from the Compromise of 1850 to the end of Reconstruction. Focuses on the sectional crisis of the 1850s, the Civil War, and the Reconstruction process after the war.

- HIST 6204 United States, 1877-1921** 3-0-3  
A study of United States history from the end of Reconstruction to the end of the Wilson administration. Emphasizes diplomatic, ethnic, cultural, political, and social developments.
- HIST 6205 United States, 1921-1945** 3-0-3  
A study of United States history from the end of World War I to the end of World War II. Focuses on the “Roaring ’20s,” the Great Depression, and U.S. involvement in World War II.
- HIST 6206 United States Since 1945** 3-0-3  
A study of United States history since World War II with emphasis on political, cultural, social, and economic developments and the nation’s foreign relations.
- HIST 6207 United States Diplomacy to 1921** 3-0-3  
A study of United States foreign relations from the Revolutionary period through 1921.
- HIST 6208 United States Diplomacy since 1921** 3-0-3  
A study of United States foreign relations since 1921.
- HIST 6211 Georgia History through 1865** 3-0-3  
A study of Georgia’s history from its occupation by the earliest Indians through the Civil War, with attention to the state’s development in its regional, national, and international context. Satisfies the Georgia History legislative requirement.
- HIST 6212 Georgia History since 1865** 3-0-3  
A study of Georgia’s history from the Civil War to the present, with attention to the state’s development in its regional, national, and international context. Satisfies the Georgia History legislative requirement.
- HIST 6220 Local History** 3-0-3  
A study of the methodology of local history research and writing. The course examines aspects of South Georgia history as a means of providing the student with an opportunity to apply the methodology.
- HIST 6221 The Old South** 3-0-3  
A detailed study of the social, economic, cultural, and intellectual life of the colonial and antebellum South, with consideration of the influence of slavery.
- HIST 6222 The New South** 3-0-3  
A history of the South since the Civil War, with special attention to political, social, economic, and cultural developments, as well as the problems of southern blacks after emancipation.
- HIST 6225 History of the American West** 3-0-3  
History of the American West from Spanish colonial times to the present. The course will consider economic, social, political, and cultural developments of the region.
- HIST 6226 Southeastern Colonial Experience** 3-0-3  
A study of the American Southeast in colonial times. The course will examine English, Spanish, and French colonial activity as well as the distinctive history of African Americans and Native Americans in the region as they relate to the colonizing powers.
- HIST 6231 African American History to 1865** 3-0-3  
The history of African-Americans from their origin in Africa to the end of slavery in the U.S., with emphasis on their economic life and social thought.
- HIST 6232 African American History Since 1865** 3-0-3  
The history of the African-American struggle for equality after emancipation, with special focus on the problems of black leadership from Frederick Douglass to the present.
- HIST 6240 American Social History** 3-0-3  
Analysis of the major trends in religion, culture, social structures, and social groups in the United States from the Colonial Era until the present. Particular attention is paid to the experiences of the various ethnic groups making up the American people.

- HIST 6241 Native American History to 1850** 3-0-3  
 Overview of Native American history in North America from the earliest human occupation of the continent to 1850. The course examines the economic, cultural, diplomatic, military, and social history of Native Americans, including the development and implementation of Indian policies by non-natives.
- HIST 6242 Native American History Since 1850** 3-0-3  
 Overview of Native American history in North America since 1850. The course examines the economic, cultural, diplomatic, military, and social history of Native Americans, including the development and implementation of United States Indian policy
- HIST 6243 Native People in the American Southeast** 3-0-3  
 A study of the native peoples of the southeastern United States from prehistory to Removal. The course will emphasize social and cultural changes as well as relationships among native groups.
- HIST 6250 History of Religion in the South** 3-0-3  
 Overview of general religious patterns and their influence on southern society, with particular attention to mass religious movements such as the Great Awakening, Great Revival, Mission/Antimission Movement, Confederate Religion, African American Religion, Holiness/Pentecostalism, the Charismatic Movement, and the rise of the Religious Right. The course also will focus on the origins and development of the major denominations in the South.
- HIST 6261 Women in the U.S. to 1869** 3-0-3  
 A study of United States history from the perspective of women. Includes social, cultural, political, intellectual, and economic aspects of the nation's history, and more specifically, the ways women influenced and were influenced by various events and movements in U.S. history from the Colonial period to 1869.
- HIST 6262 Women in the U.S., 1869 to the Present** 3-0-3  
 A study of United States history from the perspective of women. Includes social, cultural, political, intellectual, and economic aspects of the nation's history, more specifically, the ways women influenced and were influenced by various events and movements in U.S. history from 1869 to the present.
- HIST 6270 History of Women in the U.S. South** 3-0-3  
 A study of the history of the U.S. South from women's perspectives. An examination of the contributions of women to southern social, cultural, and political developments, and of the ways in which gender, class, and race influence women's regional identity.
- HIST 6280 History of U.S. Women Activists and Social Reformers** 3-0-3  
 An examination of women activists and reformers at different periods in U.S. history, of the issues that have motivated women to activism and reform efforts, and of the ways women have contributed to, influenced, and been influenced by various social movements in U.S. history
- HIST 6290 U. S. Military History** 3-0-3  
 A study of military experiences and issues in American history from the Colonial Era to the present. The course analyzes war, its economic issues, technological developments, politics, and other factors that have influenced military aspects of American history.
- HIST 6291 U. S. Political History I** 3-0-3  
 A study of U.S. political history to 1877. Special emphasis will be placed on national elections and the parties and issues that have influenced American political history.
- HIST 6292 U. S. Political History II** 3-0-3  
 A study of U.S. political history from 1877 to the present. Special emphasis will be placed on national elections and the parties and issues that have influenced American political history.

- HIST 6301 Colonial Latin America** 3-0-3  
The founding, growth, and development of Latin America by Spain and Portugal to the wars of independence.
- HIST 6302 Republican Latin America** 3-0-3  
Major historical trends in Latin America since the wars of independence.
- HIST 6303 The Spanish Borderlands** 3-0-3  
A study of the history of Spanish North America and its influence on the history of the United States and Native Americans, 1513-1850. Special emphasis will be placed on the region's diversity of peoples and intercultural relations as well as aspects of social, cultural, economic, imperial, and military history.
- HIST 6304 The Caribbean** 3-0-3  
Political, economic, social, and cultural developments of the major Caribbean countries, 1492 to the present.
- HIST 6401 East Asia** 3-0-3  
An analysis of the principal historical and cultural developments in China, Japan, and Korea, with special emphasis upon the interactions of those nations among themselves, their responses to western culture, and their roles in regional and world affairs.
- HIST 6402 Asia in the Modern World** 3-0-3  
A general overview of the role of Asia in the contemporary world, with special reference to such phenomena as geography, population trends, cultural diversity, and regional and world interactions of the Asian nations.
- HIST 6403 The Indian Subcontinent** 3-0-3  
An analysis of the 5000-year-old culture of the Indian subcontinent and Sri Lanka, with major emphasis upon the indigenous religions of the region and the impact of western culture and Christianity. Other topics considered are population, caste, the family, village life, government organization, the impact of British rule, and the independence movements that led to the establishment of the independence of India, Sri Lanka, and Bangladesh.
- HIST 6404 History of the Vietnam War** 3-0-3  
An exploration of the many interrelated aspects of the conflict in Vietnam. Topics include French colonization, Ho Chi Minh and Vietnamese nationalism, the 1946-1954 war between the French and the Vietminh, the Cold War policies of the United States, escalating United States intervention in Vietnam, the United States's war in Vietnam (1965-1973), the fall of Saigon, domestic opposition to the war within the U.S.A., and postwar legacies of the conflict.
- HIST 6501 History of the Middle East to 1798** 3-0-3  
Overview of the political, religious, and cultural history of the Middle East from the beginning of the Islamic era to Napoleon's invasion of Egypt.
- HIST 6502 History of the Middle East Since 1798** 3-0-3  
Overview of the history of the Middle East in the modern period. The course examines the development of modern states, the effects of imperialism, the impact of World War I and II, and the results of the Arab-Israeli conflict.
- HIST 6511 Precolonial Africa** 3-0-3  
An analysis of the 8000-year-old cultures of the Nile Valley, including Egypt, Nubia, and Kush; West Africa and its contacts with the Middle East and Europe; the East African city-states and their contacts with India.
- HIST 6512 Modern Africa** 3-0-3  
An examination of the European colonization of Africa and the African response. The course also examines the emergence of African nationalism and the problems of creating new states.



<b>HIST 6810 Internship in History</b>	3-0-3 to 9-0-9
<b>Graded “Satisfactory” or “Unsatisfactory.</b> Supervised practical experience related to the discipline of history in an appropriate agency, combined with a program of academic work. The number of credit hours granted is dependent on the nature of the program, the hours worked, and the academic program approved in advance. A maximum of 9 hours will be awarded for HIST 6810.	
<b>HIST 7000 Seminar in Historiography</b>	3-0-3
A seminar focusing on the history of historical writing from the ancient world to the present. Topics covered include major themes, schools of thought, methods of research, and the writings of influential historians.	
<b>HIST 7101/7102/7103 Seminars in United States History</b>	3-0-3 each
Seminars on selected topics in the history of the United States.	
<b>HIST 7201/7202 Seminars in British History</b>	3-0-3 each
Seminars on selected topics in British history.	
<b>HIST 7301/7302 Seminars in European History</b>	3-0-3 each
Seminars on selected topics in European history.	
<b>HIST 7401/7402 Seminars in Latin American History</b>	3-0-3 each
Seminars on selected topics in Latin American history.	
<b>HIST 7501/7502 Seminars in Asian History</b>	3-0-3 each
Seminars on selected topics in Asian history.	
<b>HIST 7600 Seminar in African History</b>	3-0-3
Seminar on selected topics in African history	
<b>HIST 7700 Seminar in Middle Eastern History</b>	3-0-3
Seminar on selected topics in Middle Eastern history.	
<b>HIST 7800 Seminar in Women’s History</b>	3-0-3
Seminar on selected topics in Women’s history.	
<b>HIST 7950 Directed Study in History</b>	3-0-3
Supervised readings in areas of history not normally available in regular graduate course offerings, with regular conferences between instructor and student.	
<b>HIST 7970 Libraries and Literacy in History</b>	<b>3 credit hours</b>
<b>Also offered as MLIS 7970.</b> An exploration of the development of reading, writing, and information management from the proto-literate stages of the ancient Near East to the present computer age. Intellectual foundations of research and librarianship will be emphasized in their historical contexts.	
<b>HIST 7999 Thesis</b>	6-0-6

#### INTL: INTERNATIONAL PROGRAMS

<b>INTL 5000 Foreign Exchange</b>	0-0-0
A course for foreign students enrolled at VSU under official exchange agreements of the University.	
<b>INTL 5170 Topics in International/Intercultural Studies</b>	1-0-1 to 3-0-3
Special topics in international studies include on-campus experiences, seminars, workshops such as the National Model United Nations program, and the courses offered in conjunction with the Focus lecture series each spring. May be repeated for credit.	

- INTL 5500 Study Abroad** 0-0-0 to 3-6-3  
**Prerequisite: Acceptance to a VSU study abroad program.** Courses for students studying abroad on VSU-approved programs. Students must have written approval from the Center for International Programs and relevant academic units to register for these courses. The number of credit hours granted is dependent on the nature of the program. Faculty supervisors in relevant departments will be responsible for assigning credit and reporting grades.
- INTL 5501 Study Abroad** 0-0-0 to 3-6-3  
**Prerequisite: Acceptance to a VSU study abroad program.** Courses for students studying abroad on VSU-approved programs. Students must have written approval from the Center for International Programs and relevant academic units to register for these courses. The number of credit hours granted is dependent on the nature of the program. Faculty supervisors in relevant departments will be responsible for assigning credit and reporting grades.
- INTL 5502 Study Abroad** 0-0-0 to 3-6-3  
**Prerequisite: Acceptance to a VSU study abroad program.** Courses for students studying abroad on VSU-approved programs. Students must have written approval from the Center for International Programs and relevant academic units to register for these courses. The number of credit hours granted is dependent on the nature of the program. Faculty supervisors in relevant departments will be responsible for assigning credit and reporting grades.

### **ITED: INSTRUCTIONAL TECHNOLOGY**

- ITED 7000 Technologies for Teaching and Learning** 3-0-3  
 Exploration and application of tools and techniques to support education, academic productivity, and professional development. Includes legal and ethical issues related to technology.
- ITED 7040 Thinking and Learning with Computers** 3-0-3  
 Exploration of computer applications as cognitive tools for engaging and enhancing thinking in learners. Examines the theoretical, pedagogical, and practical reasons for using computers as thinking tools.
- ITED 7050 Distance Education** 3-0-3  
 Introduction to distance education technologies and their utilization as instructional delivery systems.
- ITED 7070 Decision-Oriented Research and Evaluation** 3-0-3  
 Introduction to field-based research and evaluation issues and methodologies. The course covers problem identification, sources of data, communication with clients, legal and ethical considerations, use of data for decision making, and research and evaluation techniques, including action research.
- ITED 7080 Technology and Learning Standards** 3-0-3  
 Integration of technology into learning environments with an emphasis on matching technology with instructional approaches, content, student needs, and assessment to meet Georgia Performance Standards.
- ITED 7100 Foundational Theories in Instructional Technology** 3-0-3  
 Introduction to theories of learning, instruction, communication, information, and systems as applied to research and practice in the field of instructional technology. Includes presentation skills and instructional techniques.
- ITED 7200 Information Sources and Uses** 3-0-3  
 Introduction to information sources including Internet and databases, search strategies, information retrieval, access issues, legal and ethical issues, and evaluation of information.

- ITED 7201 Information Resources and Services** 3-0-3  
Development and application of knowledge and skills necessary to provide information resources and services in P-12 school media centers. The course includes strategies for integrating information access skills into the curriculum, selecting and evaluating resources in various formats, building media center collections, and delivering traditional and electronic services.
- ITED 7202 Bibliographic Organization** 3-0-3  
Introduction to basic cataloging and classification tools and processes as applied to integrated electronic systems. This course includes bibliographic networks, resource sharing, and database maintenance and evaluation.
- ITED 7203 Administering School Media Centers** 3-0-3  
**Prerequisites:** ITED 7200, 7201, 7202. Study of school library media professionalism and the organization, functions, facilities, and management of P-12 school media centers. This course includes planning, coordinating, supervising, budgeting, and evaluating media center personnel, services, and programs.
- ITED 7299 Internship in School Media Centers** **3 hours credit**  
**Prerequisite:** Approval of advisor. Supervised field experience in administering P-12 school media centers.
- ITED 7300 Instructional Design** 3-0-3  
Introduction to the systematic design of instruction and applied research, including front-end analysis, use of instructional learning theories to select learning strategies, assessment, and formative and summative evaluation.
- ITED 7301 Systematic Design of Instruction** 3-0-3  
Application of systematic design principles to instructional and non-instructional projects. Includes project management, team building, and development issues for different delivery systems.
- ITED 7302 Needs Assessment** 3-0-3  
Application of research and evaluation skills to a field-based needs assessment; investigation of non-instructional solutions with attention to performance improvement. The course includes the use of job task analysis, consideration of organizational cultures, and application of team-building skills.
- ITED 7303 Advanced Instructional Design** 3-0-3  
**Prerequisite:** Approval of advisor. Development of a professional project in which students design, implement, and evaluate an instructional product or learning environment.
- ITED 7399 Internship in Technology Applications** **3 hours credit**  
**Prerequisite:** Approval of advisor. A university-supervised field experience in an instructional technology setting.
- ITED 7400 Computer and Network Technology** 3-0-3  
Introduction to computer system components, connections, network equipment, and delivery system management. Emphasis is given to concepts and hand-on activities related to configuration, specifications, standards, and installations.
- ITED 7401 Using Networked Systems for Teaching and Learning** 3-0-3  
Practical experiences in setting up, managing, and using network applications to support instruction, collaboration, and computer-mediated communication.

Most credit notations on the far right are in the pattern 3-0-3. The first number is the number of lecture hours (or equivalent) each week; the second number is the number of laboratory hours (or equivalent) each week; the third number, **in bold**, is the number of semester hours credit.

- ITED 7403 Instructional Technology Seminar** 3-0-3  
In-depth investigations of specific contemporary topics and technologies using computer-mediated communications. Electronic media are the primary vehicles for course content and contact.
- ITED 7500 Management and Production of Multimedia Projects** 3-0-3  
Design, production, and management of multimedia projects for instruction. Emphasis is on design, development, utilization, management, and evaluation of team-based projects.
- ITED 7900 Special Topics in Instructional Technology** 1-0-1 to 3-0-3  
In depth study of specific issues in instructional technology. Course may be repeated under different topics.
- ITED 8100 Theories, Models, and Perspectives of Instructional Technology** 3-0-3  
Survey and analysis of the theoretical perspectives of change, communication, diffusion, systems, learning, and instruction as applied in instructional technology.
- ITED 8200 Instructional Design for Training and Education** 3-0-3  
Applications of systematic design principles to address as identified need in a training or education context. This course includes problem identification, message design, instructional strategies, and learner characteristics.
- ITED 8300 Technology Tools for Training and Education** 3-0-3  
**Prerequisite: ITED 8200.** Application of various technologies and products for instructional development. Includes in-depth use of computer-related technology tools to create effective instructional materials.
- ITED 8400 Technology Selection for Learning Environments** 3-0-3  
Practical experiences as evaluators and consumers of educational technology based on research and review of commercial, educational, and other authoritative sources. The course includes source, vendor, and product analysis, study of effectiveness and other benefits, and incorporation in technology plans and facilities.
- ITED 8500 Leadership in Instructional Technology** 3-0-3  
A study of theories and techniques for facilitating instructional and technological change. Emphasis is on team building, reflective practice and application in a field-based setting.
- ITED 8900 Special Topics in Instructional Technology** 1-0-1 to 3-0-3  
Advanced study of specific contemporary issues in instructional technology. Course may be repeated under different topics.
- ITED 8960 Best Practices Literature in Instructional Technology** 3-0-3  
Broad critical analysis of professional literature in order to define, frame, and contextualize action-research projects. The use of print and on-line resources to identify important theoretical and empirical contributions that connect action-research interests to existing professional literature is discussed. Emphasis is placed on learning the skills of reviewing literature and applying the conventions of academic writing using the Publication Manual of the American Psychological Association.
- ITED 8970 Action Research Methods and Planning** 3-0-3  
**Prerequisite: ITED 8960 or permission of the instructor.** An in-depth study of the foundations, assumptions, methods, techniques, and ethics of action research, along with a framework for evaluating action-research studies. The focus is on designing a study to enhance technology-based learning and human performance in a learning organization.
- ITED 8999 Journal-Ready Thesis** 3 hours credit  
**Prerequisite: ITED 8970.** The data collection, analysis, and reporting phase of the Education Specialist research project. May be repeated.

## KSPE: KINESIOLOGY AND PHYSICAL EDUCATION

- KSPE 6500 Workshop in Coaching Athletics** 3-0-3  
A workshop dealing with the techniques and strategies of football, basketball, baseball, and track. General topics relating to the psychology of coaching to administrator's problems and to physiological principles are also covered.
- KSPE 7010 Exercise Physiology** 2-2-3  
Principles of physiology with special emphasis on the integration of organ systems in adapting to the requirements of muscular activity during exercise.
- KSPE 7020 Scientific Analysis of Human Movement** 2-2-3  
Mechanical analysis of motor skills with special emphasis on the laws of physics and their application to physical education and athletics.
- KSPE 7040 Motor Learning** 3-0-3  
Theories of learning and other psychological principles that relate to the mastery of motor skills are explored. Current research in both educational psychology and physical education is investigated.
- KSPE 7050 Advanced Exercise Testing and Prescription for Various Populations** 3-0-3  
**Prerequisite: KSPE 3011 or equivalent or permission of the instructor.** An advanced concentrated study of KSPE 3011. Topics include various exercise testing protocols for specific populations, radionuclide techniques, predictive implications, value a screening tool, problems related to exercise electrocardiogram, interpretation, and exercise recommendations and prescription.
- KSPE 7060 Exercise Electrocardiography** 3-0-3  
**Prerequisite: BIOL 2652.** A basic understanding of the 12-lead electrocardiogram as it relates to graded exercise testing, training, and functional evaluation. The course is designed particularly to assist the clinical exercise physiologist in developing the skills required for quickly identifying electrocardiographic patterns at rest and during exercise.
- KSPE 7070 Sports Nutrition** 3-0-3  
**Prerequisite: KSPE 3200 or permission of instructor.** Emphasizes the application of nutritional concepts to sport and physical activity. Included will be information relative to dietary modifications for optimal athletic performance.
- KSPE 7080 Sport-Related Illnesses and Conditions** 3-0-3  
Designed to provide an in-depth investigation and study of sport-related illnesses and conditions. The course will also study proper techniques and methodologies of assessing and managing these illnesses and conditions.
- KSPE 7100 Exercise Cardiovascular Physiology** 3-0-3  
**Prerequisite: KSPE 3420.** A concentrated study in exercise physiology of the healthy and diseased heart. Emphasis is placed on normal versus abnormal conditions and their effect on exercise testing and training and myocardial adaptations under conditions of acute and chronic exercise.
- KSPE 7120 Physical Education Pedagogy** 3-0-3  
Provides the student with opportunities to research and apply a variety of teaching models and teaching methodologies in addition to related instructional practices associated with physical education.
- KSPE 7130 Curriculum in Physical Education** 3-0-3  
Criteria and methods of curriculum construction as they apply to health education and physical education are examined. The modern conceptual approach and its implication on the physical education and health education program P-12 are also explored.

- KSPE 7140 Physical Education for Teachers** 3-0-3  
 Growth and developmental patterns of children and development of physical education programs and activities for students in grades pre-kindergarten through grade eight. Integration of the physical education program with the total school curriculum and other school programs is discussed. The course is open to all College of Educations majors eligible for graduate-level coursework.
- KSPE 7160 Human Kinetics** 4-4-6  
 The scientific study of human motion as applied to physical activity, fitness, and human performance. Designed to help the master teacher of physical education develop, advocate, and promote knowledge as it relates to the enhancement of human movement and lifetime activity participation.
- KSPE 7170 Foundations of Physical Education** 6-0-6  
 Foundations of innovative physical education programs that promote physical activity, fitness, and wellness for a lifetime through positive modeling. Designed to aid the master teacher of physical education in promotion of quality student lifestyles through knowledge and application utilizing historical perspectives, diversity, and technology.
- KSPE 7200 Contemporary Issues in Health and Physical Education** 3-0-3  
 An exhaustive inquiry and discussion of contemporary personal, public health, and physical education issues at the local, national, and international levels with special emphasis on the effects of these issues on health and physical education.
- KSPE 7220 Sociology of Sport** 3-0-3  
 The relationship between sport and culture is explored and sport's effect on human relations is analyzed.
- KSPE 7230 Psychology of Sport** 3-0-3  
 The relationship between sport and pertinent psychological principles is investigated. In-depth analysis of research in the area is also undertaken.
- KSPE 7240 Organization and Administration of Physical Education** 3-0-3  
 Current organizational patterns and administrative techniques are analyzed and applications to practical situations are stressed.
- KSPE 7250 Ethics in Sports** 3-0-3  
 An investigation of the ethical issues involved in sports and society. This investigation will proceed by applying philosophical techniques in ethical problem-solving. The course will consider what these problems are, how they arise, and possibilities for how they may be solved.
- KSPE 7260 Professional Practices** 6-0-6  
 An instructional unit encompassing the dynamics impacting the professional growth and development of the physical education master teacher. Interrelationships within teaching and coaching practices are investigated.
- KSPE 7300 Special Topics in Physical Education** 1-0-1 to 6-0-6  
**Prerequisite: Permission of the instructor.** Permits the development of special topics or issues in the areas of health, physical education, health education, health fitness, and sports medicine.
- KSPE 7400 Directed Study in Health Sciences and Physical Education** 1-0-1 to 6-0-6  
**Prerequisite: Approval of Area Coordinator, Graduate Coordinator, and Department Head.** Development and in-depth study of an approved topic of interest pertinent to the fields of health sciences and physical education.
- KSPE 7900 Internship** 1-0-1 to 6-0-6  
**Prerequisite: Approval of advisor, Program Coordinator, Graduate Coordinator, and Department Head.** Provides the students with an opportunity to apply what they have learned in the classroom to actual working situations, as well as learn from professionals with whom they will work in the field.

**KSPE 7910 Capstone Seminar in Physical Education** 2-0-2  
**Prerequisite:** Student must be enrolled for the final semester of the program of study. Reflection and discussion of professional practices relative to the program of study. Presentation and defense of professional electronic portfolio.

### **LEAD: EDUCATIONAL LEADERSHIP**

**LEAD 7010 Ethics and Issues in Educational Leadership** 3-0-3  
A study with emphasis on its application to contemporary issues in the field of educational leadership.

**LEAD 7100 Educational Leadership** 3-0-3  
An examination of the application of the processes of interpersonal relations and effective leadership and their relationship to successful school programs.

**LEAD 7200 Principles of Curriculum and Instruction for Educational Leaders** 3-0-3  
An examination of curriculum development and contemporary changes as they relate to social aims, learner characteristics, and social problems. Existing research in the area of curriculum and instruction pertinent to educational leaders is critiqued. Emphasis is on curriculum and instruction foundations, design, basic concepts, theory, and trends of curriculum from early childhood through secondary levels.

**LEAD 7210 Ethics and Laws** 1-0-1  
Review of the major statutes and litigation affecting educational and educational-related areas as well as ethical decision-making practices. Emphasis is on information about professional ethics and behavior appropriate to educational and educationally-related settings.

**LEAD 7300 Fiscal and Facilities Management for Educational Leaders** 3-0-3  
Content covers the area of financing of school corporations in the current economic and political setting, with emphasis on interrelationships of educational, economic, and political decisions. Applications of school business management practices to support such services as transportation, food service, plant services are analyzed.

**LEAD 7400 Legal Issues for Educational Leaders** 3-0-3  
An overview of the legal structure of education, liability, constitutional rights, contractual relationships, federal and state regulations, collective action, and special education rules and regulations is provided. Historical perspective in law and education with in-depth review of case law, showing the evolution of courts as educational policy makers.

**LEAD 7500 Human Resource Management and Development** 3-0-3  
Examination of the recruitment, selection, and induction of new employees; faculty development and evaluation; laws relating to employment practices; and interpersonal skills involved in student, staff, and community relationships.

**LEAD 7600 Technology Leadership for School Improvement** 3 hours credit  
Instruction and supervised practice leading to educational leadership candidates' application of technology skills designed to foster school improvement and student achievement.

**LEAD 7650 Leadership Issues in Higher Education** 3-0-3  
The processes of effective leadership and their relationship to the success of educational and educationally-related programs at the community level will be analyzed. Organization and administration of relevant settings with a focus on the competencies necessary for leadership and management at the community level.

**LEAD 7700 Supervision of Instructional Programs** 3-0-3  
Study of the knowledge and skills necessary for the effective and efficient supervision of instructional programs. A variety of supervisory models will be employed. Knowledge of learning, teaching, and student development will be stressed as a basis for making supervisory decisions.

- LEAD 7800 Organization and Governance of Higher Education** 3-0-3  
 An introduction to the organization of postsecondary institutions, the governance of these institutions, and the day-to-day as well as the long term administration of such institutions. This course is appropriate for those who are now or will be working in post secondary education at any level as it offers explanation and increased understanding of the organizational dynamics of institutions of higher education.
- LEAD 7810 Finance and Budgeting in Higher Education** 3-0-3  
 This course considers all sources of financing in higher education, the types and sources of student financial aid, budgeting, and cost effectiveness analysis. In addition, the articulation of each of these issues with the institution's mission and goals is a major thrust of the course.
- LEAD 7820 Assessment and Evaluation in Higher Education** 3-0-3  
 An introduction to the concept of institutional effectiveness which focuses on an institution's ability to use planning strategies and evaluation information to assess current performance and plan for improvements. The design and appropriate implementation of assessment and evaluation methods as they relate to addressing various accreditation standards will be examined. Examples of how to develop a comprehensive system of evaluation related to missions and goals will be described for academic and non-academic support units.
- LEAD 7830 Law and Policy in Higher Education** 3-0-3  
 This course is intended to familiarize students with statutory and case law that has implications for higher education administrators and policy makers with particular emphasis on such areas as employment, including affirmative action, dismissal, contracts, civil rights, due process, and student rights.
- LEAD 7900 Internship in Educational Leadership I** 3 hours credit  
**Prerequisite: Consent of instructor.** A supervised field experience designed for the student to acquire and demonstrate appropriate educational leadership, administrative, and instructional supervision competencies.
- LEAD 7910 Internship in Educational Leadership II** 3 hours credit  
 A supervised field experience designed for the student to acquire and demonstrate appropriate educational leadership, administrative, and instructional supervision competencies.
- LEAD 7921 Internship Preparation in Higher Education Leadership** 3 hours credit  
**Prerequisite: Permission of advisor.** A supervised internship relevant to the student's program in postsecondary leadership is provided. This field experience is focused on acquiring first-hand knowledge of appropriate leadership, administrative, and management competencies at the postsecondary level.
- LEAD 7922 Internship in Higher Education Leadership** 3 hours credit  
**Prerequisite: LEAD 7921 and permission of advisor.** A supervised internship relevant to the student's program in postsecondary leadership is provided. This field experience is focused on developing appropriate leadership, administrative, and management competencies at the postsecondary level.
- LEAD 8200 School Reform and Change** 3-0-3  
 Effective strategies and tactics for changing schools, varieties of school restructuring, and the individual and organization dynamics involved in change will be presented. Change and change strategies in formal and informal organizations are foci. Students will develop change strategies and apply them to selected situations.
- LEAD 8300 Social Context of Educational Leadership** 3-0-3  
 A retrospective contemporary and prospective examination of the social, cultural, political, and philosophical contexts from which the current issues that affect schools and schooling have evolved.



- LEAD 8400 Organizational Theory for Educational Leaders** 3-0-3  
A critical analysis of the theoretical assertions and empirical knowledge claims that have led to the dominant structures, power relationships, and performance expectations of American schools.
- LEAD 8410 Special Education Law for Educational Leaders** 3-0-3  
Introduction, for practicing and prospective school administrators, to the legal aspects of the education of students with disabilities. Includes statutes, case law, and administrative regulations pertaining to special education
- LEAD 8610 School, Community, and Media Relations for Educational Leaders** 3-0-3  
This course examines school-community-media relationships and techniques of communication employed between the school and a variety of public groups. Typical situations in which conflict is present in educational and educationally-related settings are analyzed, with a focus on conflict management skill acquisition.
- LEAD 8650 Personnel Issues and Considerations** 3-0-3  
Role definitions of personnel supervision, analysis of role conflict, needs assessments, observation and diagnosis of teacher classroom performance, writing remedial plans, conducting post observation conferences, and evaluating performance will be discussed. Administration of school personnel policies and practices relating to professional staff, supporting staff, and students will be analyzed.
- LEAD 8660 Business and Finance** 3-0-3  
This course conveys the business and financial functions involved in managing schools, such as staffing, salary, scheduling, inventories, and accounting procedures. Development, implementation, and evaluation of financial resource and allocation systems will be examined.
- LEAD 8680 Site-Based Management** 3-0-3  
Knowledge and skills for implementing shared decision-making, group goal-setting, team-building, and site-based management will be addressed. Skills and procedures for implementing site-based management will be developed.
- LEAD 8850 Directed Study in Educational Leadership** 1 to 3 hours credit  
An intensive study in the student's field of specialization to meet individual needs and interests. No more than two directed study courses may be used in a program of study.
- LEAD 8900 Internship and Field-based Research I** 3 hours credit  
A supervised application of leadership competencies to the resolution of problems in an educational setting.
- LEAD 8910 Internship and Field-based Research II** 3 hours credit  
**Prerequisite:** LEAD 8900. A supervised capstone field-based project involving school improvement.
- LEAD 9000 Special Topics in Educational Leadership** 3 hours credit  
Advanced study focusing on public school improvement and or the improvements of school leaders through student-designed projects, research, or practica that address the program's conceptual framework.
- LEAD 9010 Instructional Leadership for School Administrators** 2-0-2  
Focus on the theoretical and practical knowledge base in educational leadership and the skills and processes needed for school improvement. Emphasis will be placed on leadership for instruction and learning to meet the needs of a diverse community of learners.
- LEAD 9020 Planning for Instructional Leaders** 2-0-2  
Theoretical and practical aspects of change, with emphasis on the knowledge and skills to plan for change in an efficient, effective, and systematic fashion for instructional improvement in schools.
- LEAD 9030 Leadership Problems: Interdisciplinary Analysis** 2-0-2  
The focus of this course is on the application of interdisciplinary analysis and leadership skills to the resolution of educational problems and issues.

**LEAD 9870 School Organizational and Cultural Studies** 3-0-3  
**Prerequisite:** RSCH 9800, RSCH 9820, RSCH 9840, RSCH 9860. Simulation and field practice in developing and implementing educational research on the effects of school organization and culture.

## MATH: MATHEMATICS

**MATH 5010 History of Mathematics** 3-0-3  
**Prerequisite:** MATH 2261. A study of the development of mathematics from primitive times to the twentieth century; including numeral systems, arithmetical methods, origins of algebra, geometry, trigonometry, analytic geometry, calculus; and selected topics from modern mathematics.

**MATH 5040 Set Theory** 3-0-3  
**Prerequisite:** MATH 2262. Propositional and predicate logic; mathematical induction. Logic and structure of sets as related to mathematical proof. Relations, and cardinality.

**MATH 5080 Algebraic Structures** 3-0-3  
**Prerequisite:** MATH 3040/5040. An examination of the structural foundations of the secondary school algebra curriculum. Topics include rings, integral domains, groups (including groups of transformations) and polynomials. Emphasis on development of students' deductive reasoning and proof techniques.

**MATH 5140 Mathematics for Special Education Teachers** 3-0-3  
**Prerequisite:** MATH 1111. Fundamental mathematical concepts beginning with prenumber notions and then extending to number concepts, numeration systems, and computational algorithms for whole and rational numbers; geometry and measurement, and the role of technology in mathematics instruction.

**MATH 5161 Mathematics for Early Childhood Teachers I** 3-0-3  
**Prerequisite:** Grade of "C" or higher in either MATH 1101 or MATH 1111 and admission to the Teacher Education Program of the College of Education, or permission of instructor. An in-depth study of the concepts and processes underlying the P-5 school mathematics curriculum, with special emphasis on numeration, number systems, estimation, algebraic thinking, and computational algorithms. Problem solving and historical context serve as unifying strands.

**MATH 5162 Mathematics for Early Childhood Teachers II** 3-0-3  
**Prerequisite:** Grade of "C" or higher in Math 3161. An in-depth study of concepts and processes underlying the P-5 school mathematics curriculum, with special emphasis on measurement, geometry, and the fundamentals of probability and statistics. Problem solving and historical context serve as unifying strands.

**MATH 5163 Numbers and Operations for P-5 Teachers** 3-0-3  
**Prerequisite:** P-5 Teaching Certificate. Students who have already taken MATH 2160, MATH 3161, Math 4161, or MATH 6161 may not receive credit for this course. Major concepts and techniques of numbers and operations in mathematics for P-5 teachers. The course includes multiple strategies, including the use of a variety of manipulatives, to address various learning styles and multiple intelligences as well as a range of assessment techniques for gauging P-5 students' mathematical understanding using problem solving as a unifying strand.

- MATH 5164 Understanding Algebra for P-5 Teachers** 3-0-3  
**Prerequisite:** P-5 Teaching Certificate. Students who have already taken MATH 2160, MATH 3161, Math 4161, or MATH 6161 may not receive credit for this course. Major concepts and techniques of algebra and algebraic thinking in mathematics for P-5 teachers. The course includes multiple strategies, including the use of a variety of manipulatives, to address various learning styles and multiple intelligences as well as a range of assessment techniques for gauging P-5 students' mathematical understanding using problem solving as a unifying strand.
- MATH 5165 Understanding Geometry for P-5 Teachers** 3-0-3  
**Prerequisite:** P-5 Teaching Certificate. Students who have already taken MATH 2160, MATH 3162, Math 4161, MATH 5162, or MATH 6161 may not receive credit for this course. Major concepts and techniques of geometry in mathematics for P-5 teachers. The course includes multiple strategies, including the use of a variety of manipulatives, to address various learning styles and multiple intelligences as well as a range of assessment techniques for gauging P-5 students' mathematical understanding using problem solving as a unifying strand.
- MATH 5166 Understanding Data Analysis and Probability for P-5 Teachers** 3-0-3  
**Prerequisite:** P-5 Teaching Certificate. Students who have already taken MATH 2160, MATH 3162, Math 4161, MATH 5162, or MATH 6161 may not receive credit for this course. Major concepts and techniques of data analysis and probability in mathematics for P-5 teachers. The course includes multiple strategies, including the use of a variety of manipulatives, to address various learning styles and multiple intelligences as well as a range of assessment techniques for gauging P-5 students' mathematical understanding using problem solving as a unifying strand.
- MATH 5180 Mathematics for Middle School Teachers** 3-0-3  
**Prerequisite:** Grade of "C" or higher in either MATH 1101 or MATH 1111. Concepts and processes that provide the foundation for the middle-grades mathematics curriculum (5-8). Includes an in-depth study of the real number system with emphasis on the rational number system and axiomatic differences among number systems. Other topics include relations and functions, geometry (including coordinate geometry and graphing), measurement, and elementary probability and statistics.
- MATH 5190 Algebra and Geometry for Teachers** 3-0-3  
**Prerequisite:** Grade of "C" or higher in either MATH 2261 or MATH 3180. An in-depth study of the concepts and processes underlying the middle and secondary school mathematics curriculum, with special emphasis placed upon the integrated development of algebra, geometry, and analytical geometry. Problem solving and historical context serve as unifying strands.
- MATH 5340 Ordinary Differential Equations** 3-0-3  
**Prerequisite:** MATH 2402 or consent of instructor. Differential equations of first and second order, linear equations of higher order, applications.
- MATH 5510 Foundations of Geometry** 3-0-3  
**Prerequisite:** MATH 3040/5040. A study of Euclidean and non-Euclidean plane geometry from both synthetic and metric approaches. Topics include concepts related to incidence, betweenness, plane separation and convexity, congruence, and parallelism, with some attention given to geometric transformations.
- MATH 5600 Probability and Statistics** 3-0-3  
**Prerequisite:** MATH 2261. Descriptive statistics, probability distributions for discrete and continuous random variables, statistical inference, one way analysis of variance, and regression analysis.

- MATH 6081 Modern Algebra I** 3-0-3  
**Prerequisite:** MATH 4150/6150 or MATH 3040/5040 or consent of instructor. Topics from groups, rings, and fields. Subgroups, cyclic groups, permutation groups, normal subgroups, homomorphisms, Cayley's and Lagrange's Theorems, factor groups, abelian groups, direct products. Introduction to rings and fields.
- MATH 6082 Modern Algebra II** 3-0-3  
**Prerequisite:** MATH 4081/6081. Continuation of MATH 6081 with emphasis on rings and fields. Rings, integral domains, and fields. Vector spaces, extension fields, finite fields.
- MATH 6085 Applied Modern Algebra** 3-0-3  
**Prerequisite:** MATH 4081/6081. Lattices, Boolean algebras, semigroups, binary group codes, binary relations, and graphs. Special emphasis is placed on applications.
- MATH 6110 Number Theory** 3-0-3  
**Prerequisite:** MATH 2262. Elementary properties of integers including divisibility, unique factorization, progressions and prime numbers. Linear congruencies and residue classes, complete and reduced residue systems, Chinese Remainder Theorem, quadratic residues, law of quadratic reciprocity, Theorems of Fermat and Wilson, Fibonacci and perfect numbers, sums of squares, elementary theory of continued fractions.
- MATH 6150 Linear Algebra** 3-0-3  
**Prerequisites:** *Either* MATH 2150 and MATH 3040/5040 *or* consent of instructor. Introduction to the theory of vector spaces, with emphasis on finite-dimensional vector spaces, linear systems, matrices, linear transformations, eigenvalues, and related subjects.
- MATH 6161 Mathematical Reasoning** 3-0-3  
**Prerequisite:** Grade of "C" or higher in either MATH 3162 or MATH 3180 or permission of the instructor. An in-depth study of concepts and processes underlying the P-8 school mathematics curriculum, with special emphasis on informal and formal mathematical reasoning. Problem solving and historical context serve as unifying strands. The analysis and remediation of student errors manifested in the application of conceptual and procedural mathematical knowledge will also be addressed.
- MATH 6260 Mathematical Analysis** 3-0-3  
**Prerequisites:** MATH 3040/5040 or consent of instructor or MATH 2263 with a grade of "A" or "B". A study of the principles of mathematical analysis; point set topology in Euclidean and metric spaces, numerical sequences and series, continuity, differentiation, integration, sequences and series of functions.
- MATH 6300 Functions of a Complex Variable** 3-0-3  
**Prerequisite:** MATH 2263. Introductory study of the algebraic and geometric properties of the complex number system and functions of a complex variable. Limits, continuity, and differentiation of complex functions. Analytic functions and the Cauchy-Riemann conditions. Integration of complex functions; Cauchy-Goursat theorem; Cauchy integral formula; the theorems of Morera and Liouville. Taylor and Laurent series expansions. Residues and poles with applications to integration. Conformal mappings.
- MATH 6540 Introduction to Topology** 3-0-3  
**Prerequisite:** MATH 3040/5040. The study of point set topology in metric and topological spaces. Open and closed sets, compactness, connectedness, topological mappings, separation, product and functions spaces.
- MATH 6621 Mathematical Statistics I** 3-0-3  
**Prerequisites:** MATH 2263 and either MATH 2620 or MATH 3600/5600. Distributions of random variables, conditional probability and stochastic independence, multivariate and some special distributions, and distributions of functions of random variables.
- MATH 6622 Mathematical Statistics II** 3-0-3  
**Prerequisite:** MATH 4621/6621. Introduction to statistical inference, sufficient statistic, estimation theory, theory of statistical tests, and inferences about normal models.

- MATH 6625 Topics in Applied Statistics** 3-0-3  
**Prerequisite:** MATH 3600/5600 or consent of instructor. Topics in applied statistics will be selected from quality control, sampling theory, nonparametric statistics, experimental design, or regression analysis.
- MATH 6651 Numerical Analysis I** 3-0-3  
**Prerequisites:** MATH 2262 and either CS 1301 or CS 1338. Development and implementation of efficient numerical methods; locating roots of nonlinear equations; solving systems of linear equations; numerical differentiation and integration; interpolation; approximation of functions.
- MATH 6652 Numerical Analysis II** 3-0-3  
**Prerequisites:** MATH 4651/6651 and MATH 3340/5340. Continuation of MATH 6651. Determination of eigenvalues and eigenvectors of matrices; method of least squares, and curve fitting; numerical solutions of ordinary and partial differential equations.
- MATH 6901 Operations Research I** 3-0-3  
**Prerequisite:** MATH 2150 or MATH 4150/6150. Mathematical aspects and applications of operations research. Topics are selected from linear programming (mainly), integer programming, and dynamic programming.
- MATH 6902 Operations Research II** 3-0-3  
**Prerequisite:** MATH 3600/5600 or MATH 4621/6621 (Note that MATH 4901/6901 is not a prerequisite). An introduction to stochastic operations research. Topics are selected from stochastic modeling and optimization, probability models, queuing theory, and Monte Carlo simulation.
- MATH 6910 Mathematical Models** 3-0-3  
**Prerequisite:** MATH 2263 or consent of instructor. An introduction to basic principles and applications of classical mathematical models, optimization models and probabilistic models.
- MATH 6990 Special Topics in Mathematics** 3-0-3  
**Prerequisite:** Consent of instructor and Head of the Department of Mathematics and Computer Science. Topics and credits to be assigned. May be taken more than once if topics are different.

**MBA: MASTER OF BUSINESS ADMINISTRATION**  
(See WMBA for Web-Based MBA Courses)

- MBA 7030 Managerial Accounting** 3-0-3  
**Prerequisites:** ACCT 2101 and ACCT 2102 or their equivalents. An overview of the role of the accounting function in organizations. Emphasis is placed on analyzing financial information to enhance managerial decision making. The course is designed to assist managers in developing processes for evaluating the merits of historical and forecast data and using such information to add value to organizations.
- MBA 7050 Strategic Marketing** 3-0-3  
**Prerequisites:** BUSA 2106 and MKTG 3050 or their equivalents. A study of the strategic managerial aspects of marketing. Topics focus on product, price, promotion, and place in the ethical planning, implementing, and controlling of marketing operations.
- MBA 7300 Advanced Production Techniques** 3-0-3  
A survey of current production management systems and philosophies. Topics include current production systems, quality management concepts, and implementation of manufacturing planning and control systems.

- MBA 7350 Managerial Finance** 3-0-3  
**Prerequisite:** FIN 3350 or equivalent. An advanced study of the theory, principles, and practices that define the finance function in the firm as viewed from the perspective of the financial manager. The topics covered include financial planning, capital budgeting, financing the firm, capital structure management, and dividend policy. Computerized financial models are used to apply financial principles to financial problems and decision making.
- MBA 7500 Managerial Economics** 3-0-3  
**Prerequisites:** ECON 2106 and ECON 2105 or their equivalents. The application of economic principles and methodologies to the decision-making process of a business firm. Key topics include optimization and statistical techniques, consumer behavior, market demand analysis for decision making, demand forecasting, production and cost relationships, cost estimation and forecasting, and business pricing decisions.
- MBA 7630 Organizational Theory and Behavior** 3-0-3  
**Prerequisite:** MGNT 3250 or equivalent. Study of both micro- and macro-organizational behavior. Topics include motivation, leadership, job satisfaction, individual differences, group dynamics, design, organizational structure and processes, organizational politics and organizational conflict.
- MBA 7660 Advanced Quantitative Methods** 3-0-3  
**Prerequisite:** BUSA 2100 or equivalent. A seminar in the procedures, techniques and applications of quantitative methods in business. Topics include classical inference procedures, nonparametric methods, regression analysis, analysis of variance, contingency table analysis, decision theory and an introduction to methods for quality improvement. Computer software will be used in the analysis of data.
- MBA 7700 Current Topics in Business** 3-0-3  
 An examination of current topics in business. May be repeated up to a maximum of 6 hours if topics are different.
- MBA 7750 Topics in International Business** 3-0-3  
 An examination of current topics in international business. May be repeated up to a maximum of 6 hours if topics are different.
- MBA 7900 Strategic Management** 3-0-3  
 An advanced course introducing and applying concepts of strategic management. The course integrates the functional areas of an organization and develops analytical skills. Emphasis is given to the formulation and implementation of strategy in world markets.
- MBA 7990 MBA Directed Study** 3 hours credit  
 Directed graduate research or reading in Business. Proper form must be submitted to the Director of the MBA Program at least two weeks before the beginning of the semester.

#### **MFTH: MARRIAGE AND FAMILY THERAPY**

- MFTH 6700 Family Sociology** 3-0-3  
**Also offered as SOCI 6700.** The social context of contemporary issues facing families. Includes family history, cross-cultural issues, and research and theory regarding changing gender roles, family violence and abuse, divorce, single-parenting, work families, sexual orientation, non-traditional families and other relevant issues.
- MFTH 6800 Orientation to MFT Practice and Ethics** 3-0-3  
 Introduces students to the basic epistemological issues in marriage and family therapy, history of the field and current developments, professional socialization and organizations, ethics and values associated with the practice of MFT. Self awareness critical to practice is also addressed.

- MFTH 6990 Supervisor's Training in Marriage and Family Therapy** 3-0-3  
**Limited to graduate students who already hold the master's degree and are pursuing the status of "Supervisor in Training" through the American Association for Marriage and Family Therapy. Graded "Satisfactory" or "Unsatisfactory."** Offered on an individual basis, readings of supervision, styles, systemic family therapy, and ethics for supervision will be explored.
- MFTH 7050 Class, Gender, and Ethnic Issues in Applied Settings** 3-0-3  
**Also listed as SOCI 7050. Prerequisite: MFTH 6800 or SOCI 7011.** An in-depth study of the sensitivities needed by family therapists and other social science practitioners to the issues of social class, gender, and ethnicity. Addresses the interface between professional responsibilities and ethics and the social and political context of treatment. A multicultural perspective is to be developed by each student.
- MFTH 7101 Family Systems Theories** 3-0-3  
**Prerequisite: MFTH 6800.** An in-depth study of family systems theory. Emphasis on the major schools of thought included in a systems analysis of the family and current issues and ideas within family systems discourse.
- MFTH 7102 Interventions in MFT** 3-0-3  
**Pre- or co-requisite: MFTH 7101.** A review of the various intervention techniques employed by the major theoretical approaches to MFT. Emphasis on skill development, video and role-playing demonstrations, and linking practice to theory and appropriate treatment goals.
- MFTH 7103 Advanced Theories Seminar** 1-0-1  
**Prerequisite: MFTH 7102.** A series of seminars that allow students to develop in depth understanding of at least two theoretical approaches to MFT. Examples of offerings include structural/strategic, experiential, family of origin, narrative/constructivism, feminist, solution-oriented. May be repeated.
- MFTH 7200 Research in Marriage and Family Therapy** 3-0-3  
**Prerequisite: a statistics course.** Quantitative and qualitative methods for research design and data analysis in marriage and family therapy. Emphasis on current outcome and process studies and on critical evaluation and application of research data.
- MFTH 7350 Legal Issues in MFT** 1-0-1  
**Prerequisite: MFTH 6800.** Legal responsibilities and liabilities in the practice of family therapy. Addresses issues such as limits to confidentiality, therapist liability, and client privilege. Includes working with the legal system and relevant aspects of family law.
- MFTH 7400 Psychopathology & Pharmacology in MFT** 3-0-3  
**Prerequisite: MFTH 6800.** Psychological, biological, and medical issues in the practice of MFT and an introduction to pharmacology. Emphasis on DSM IV diagnosis within a systemic context and collaboration with other mental health professionals.
- MFTH 7500 Development in the Family System** 3-0-3  
**Also offered as SOCI 7500.** Human growth and development within the family system. Includes theories of individual development, developmental tasks over the family life cycle, normative and non-normative change, processes of divorce and remarriage, and social, economic, and ethnic influences on the family life cycle. Implications for practice emphasized.
- MFTH 7510 Human Sexuality and Gender** 3-0-3  
The cultural, social, physical, psychological, and interpersonal aspects of human sexuality and gender. Includes gender role socialization and the development of gendered identities, sexual functioning and attraction, sexual orientation, and problems related to sex and gender.
- MFTH 7550 Family Stress and Crisis** 3-0-3  
Understanding normative and catastrophic stress, trauma, and crisis across the lifespan from a family systems perspective. Focus on approaches to prevention and intervention with families, agencies, and communities.

- MFTH 7600 Practicum in Marriage and Family Therapy** 0-12-**6**  
**Prerequisite:** MFTH 7102 and approval of the MFT Faculty. Supervised experience in the practice of marriage and family therapy. Includes practice and live supervision at the MFT Training Clinic as well as experience in community placements. Requires a minimum of 20 hours per week. Must be taken three successive semesters for a total of 500 hours of direct client contact.
- MFTH 7601 Treatment Issues in Family Therapy** 3-0-**3**  
**Prerequisite:** MFTH 7102. Applications of family systems approaches to the treatment of issues facing families in crisis and transition. Addresses grief and loss, substance abuse, family violence and abuse, child and adolescent behavioral problems, and chronic physical and mental illness. Emphasis on conceptualizing and treatment planning.
- MFTH 7602 Couples and Sex Therapy** 3-0-**3**  
**Prerequisite:** MFTH 7102. Treatment techniques for intimate relationships. Emphasis on premarital and commitment issues, anger and conflict, gender and intimacy, and techniques for treating sexual dysfunctions.
- MFTH 7650 Special Topics in MFT** 1-0-**1** to 3-0-**3**  
A rotating series of seminars addressing important contemporary issues in the field of marriage and family therapy. Examples of topics include working with children, working with adolescents, spirituality, family violence, and substance abuse. May be repeated for credit.
- MFTH 7700 Assessment in Marriage and Family Therapy** 3-0-**3**  
**Prerequisites:** MFTH 7101 and MFTH 7500. How to assess family processes within a developmental context. Models for assessing family functioning and use of individual and family assessment instruments will be included.
- MFTH 7880 Professional Ethics Seminar** 1-0-**1**  
Addresses professional issues in the workplace. Includes marketing oneself, politics of the workplace, professional licensure and clinical membership, working in interdisciplinary teams, professional wellness, and the ethics, values, and decision-making associated with current practice issues.
- MFTH 7980 Internship in Marriage and Family Therapy** 0-2-**1** to 0-10-**5**  
**Prerequisite:** MFTH 7600. Supervised experience in the practice of marriage and family therapy in a community placement. Requires enough direct contact hours additional to practicum to total 500 before graduating
- MFTH 7990 Directed Study in Family Therapy** 1-0-**1** to 3-0-**3**  
**Prerequisite:** permission of instructor. Specialized study in an area of Marriage and Family Therapy under the direction of a faculty member.

Most credit notations on the far right are in the pattern 3-0-3. The first number is the number of lecture hours (or equivalent) each week; the second number is the number of laboratory hours (or equivalent) each week; the third number, **in bold**, is the number of semester hours credit.



## MGED: MIDDLE GRADES EDUCATION

- MGED 7900 Directed Study in Middle Grades Education** 1-0-1 to 3-0-3  
**Prerequisites: 15 Hours of Graduate Work with a “B” average.** Opportunity for intensive individual study in the student’s field of specialization of an area peculiar to his or her needs.
- MGED 7910 Educational Workshop** 3-0-3  
A concentrated study of contemporary problems and issues relevant to middle grades.

## MLIS: MASTER OF LIBRARY AND INFORMATION SCIENCE

- MLIS 7000 Foundations of Library and Information Science** 3 hours credit  
An introduction to the library and information science field, its history, and future directions. The focus is on the history, concepts, and technological development of the discipline. Students will gain familiarity with library and information theory, the discipline and sub-disciplines within the information sciences, and ethical practices and standards.
- MLIS 7050 Portfolio Development** 1 to 2 hours credit  
**Prerequisite or corequisite: MLIS 7000.** Preparation and presentation of a professional portfolio.
- MLIS 7100 Information Sources and Services** 3 hours credit  
**Prerequisite or corequisite: MLIS 7000.** An introduction to concepts and processes in reference and information science and to fundamental information sources and services provided by libraries and information organizations. An overview of the reference function includes the history and future of reference service, question negotiation, information needs analysis, effective research strategies, evaluation of information sources in various formats, and ethics of information services.
- MLIS 7110 Online Searching** 3 hours credit  
**Prerequisite or corequisite: MLIS 7000.** An introduction to the information retrieval from popular online databases, to include the World Wide Web. The course addresses key concepts such as Boolean and keyword searches and the development of complex search strategies and algorithms.
- MLIS 7120 Government Information Sources** 3 hours credit  
**Prerequisite or corequisite: MLIS 7000.** Use of and access to government documents, defining government documents, how they are generated or created, how and who uses them, how and where to find them. The course addresses government documents at the federal, state, and local levels as well as documents of international organizations (UN, EU, etc.) and foreign governments.
- MLIS 7130 Humanities Information Services** 3 hours credit  
**Prerequisite: MLIS 7100 or consent of the instructor.** Examination of processes and resources used to provide reference services in the humanities disciplines. The fields of art, communications, literature, languages, linguistics, music, philosophy, religion, and theatre will be considered.
- MLIS 7150 Social Sciences Information Services** 3 hours credit  
**Prerequisite: MLIS 7100 or consent of instructor.** Examination of social science information domains and information resources, including the structures and bibliographies of the disciplines in electronic and print format. Various information formats are examined, and appropriate search and retrieval methods are explored.

- MLIS 7160 Science and Technology Information Services** **3 hours credit**  
**Prerequisite:** MLIS 7100 or consent of instructor. A broad-based survey of the processes and resources used to provide reference services in various science and technology settings. Content represents the fields of biomedical and life sciences, earth and environmental sciences, computer science, astronomy, physics, chemistry, and mathematics.
- MLIS 7180 Library Services for Patrons with Special Needs** **3 hours credit**  
**Prerequisite or corequisite:** MLIS 7000. Disability issues in libraries, with a particular emphasis on visual disabilities. Obtaining funding and providing services for patrons with special needs will be emphasized.
- MLIS 7200 Management of Libraries and Information Centers** **3 hours credit**  
**Prerequisite or corequisite:** MLIS 7000. An introduction to the functions of library management and its underlying theoretical concepts. This course provides an overview of the history of management, an introduction to management theory and functions, including planning, leading, organizing, staffing, controlling, budgeting, human resource issues, and an understanding of management as a system involving all staff.
- MLIS 7210 Academic Libraries** **3 hours credit**  
**Pre- or co-requisite:** MLIS 7200 or consent of the instructor. An examination of the functions of the library within the higher education environment. The course promoted the Jeffersonian ideal of the library as the center of the university and explores administrative issues and service patterns specific to the academic library.
- MLIS 7220 Public Libraries** **3 hours credit**  
**Pre- or co-requisite:** MLIS 7200 or consent of the instructor. A study of the American public library and its place in contemporary communities. Topics include standards, planning, evaluation, governance, funding, and advocacy.
- MLIS 7230 Special Libraries and Information Centers** **3 hours credit**  
**Pre- or co-requisite:** MLIS 7200 or consent of the instructor. An examination of the administration and context of special libraries and information centers. Management, user services, technical services, collections, facilities, and marketing are addressed.
- MLIS 7240 Marketing Library Services** **3 hours credit**  
**Pre- or co-requisite:** MLIS 7200 or consent of the instructor. Marketing techniques and their applications in all types of libraries. Planning, research, goal-setting, relationship marketing, and marketing with technology are considered. Development of marketing plans and tools is included.
- MLIS 7250 Human Resources Management** **3 hours credit**  
**Pre- or co-requisite:** MLIS 7200 or consent of the instructor. A comprehensive look at issues that shape the nature of human relations in libraries. Topics include staff recruitment and development, diversity, equal opportunity, performance evaluation, and legal requirements.
- MLIS 7260 Leadership in Libraries and Information Centers** **3 hours credit**  
**Prerequisite or corequisite:** MLIS 7000. An introduction to leadership theory, principles, and practices. The course provides an overview of the relationship between leadership theory and the effective practice of leadership as well as an understanding of the competencies required of effective leaders in today's libraries and information organizations.
- MLIS 7270 Information Management** **3-0-3**  
**Also offered as PADM 7110.** A survey of the issues and problems of information management. Emphasis is on modern developments in the generation, storage, classification and transmission of information vital to the management of public organizations.

- MLIS 7300 Cataloging and Classification** **3 hours credit**  
**Prerequisite or corequisite: MLIS 7000.** An introduction to the organization of recordable knowledge, with emphasis on library cataloging and classification. Students will examine current applications of Anglo-American Cataloguing Rules, MARC formats, Library of Congress and Sears Subject Headings, Dewey Decimal Classification, and Library of Congress Classification. Metadata initiatives and the interpretation of technical documentation will be considered
- MLIS 7330 Cataloging the Web** **3 hours credit**  
**Prerequisite: MLIS 7300 or consent of the instructor.** Methodologies and metadata developed for cataloging the Web and other digital collections, including MARC, archival XML systems, Dubic Core, and CORC.
- MLIS 7350 Advanced Cataloging** **3 hours credit**  
**Prerequisite: MLIS 7300 or consent of the instructor.** Advanced study of the theory and practice of providing description and access to library materials. Cataloging of non-print materials, serials, and integrating sources will be included.
- MLIS 7355 Advanced Classification** **3 hours credit**  
**Prerequisite: MLIS 7300 or consent of the instructor.** Advanced study of the subject classification of recordable knowledge. Verbal and numeric approaches, including Library of Congress and Dewey Decimal classification schemes, and the principles of thesaurus construction will be considered.
- MLIS 7360 Indexing and Abstracting** **3 hours credit**  
**Prerequisite: MLIS 7300 or consent of the instructor.** The principles and practices of creating indexes and abstracts of information and knowledge resources. Varying types of indexes and abstracts, evaluation of software aids, and professional opportunities for indexers and abstractors will be considered.
- MLIS 7370 Information Architecture** **3 hours credit**  
**Prerequisite or corequisite: MLIS 7000 or consent of instructor.** Theory and techniques of designing Web sites for effective information delivery. Study of organization, labeling, navigation, and indexing systems included.
- MLIS 7400 Collection Development** **3 hours credit**  
**Prerequisite or corequisite: MLIS 7000 or consent of instructor.** Principles and processes for building and maintaining library and information center collections. Identification, evaluation, selection, acquisition, and preservation of materials in all formats will be emphasized. The contexts of all types of libraries, needs of diverse patrons, and legal and ethical issues will be considered.
- MLIS 7420 Literature for Youth** **3 hours credit**  
 A survey of books and related materials for use with students and library patrons from pre-kindergarten through grade 12.
- MLIS 7422 Programming for Children and Young Teens** **3 hours credit**  
 An overview of the nature, philosophy, design, and delivery of library programs for youngsters from birth through early teens. The course includes principles of planning, implementing, promoting, and evaluating programs for this age group. Emphasis is on creative arts, including story time and story telling, puppetry, reading incentive programs, and other age-specific activities.
- MLIS 7440 Electronic Resources in Libraries** **3 hours credit**  
**Prerequisite MLIS 7300 or MLIS 7400 or consent of instructor.** Policies and procedures for managing electronic information resources as part of a library collection. Selection, budgeting, acquisitions, cataloging, assessment, copyright, licensing, and preservation are considered.

- MLIS 7505 Applied Technologies in Library Practice** **3 hours credit**  
 A survey of the technologies defining or influencing library practices, with an emphasis on exemplary cases of applications. Topics will include computer workstations, automated systems, networking, and telecommunications, the Internet, digitization projects, program interfaces, information storage and retrieval, adaptive and assistive devices, security and privacy, and virtual user education.
- MLIS 7610 Information Policy** **3 hours credit**  
**Prerequisite or corequisite: MLIS 7000 or consent of instructor.** Study of governmental information policy, with emphasis on the United States. Issues include privacy, intellectual property, access to information, media deregulation, and networking initiatives.
- MLIS 7650 Information and Ethics** **3 hours credit**  
**Prerequisite or corequisite: MLIS 7000.** An introduction to the basic ethical precepts of the information professions and the importance of ethics. The course examines differences among ethical, legal, moral, and religious systems and includes a case-study methodology to explore ethical situations in the professional practice, drawing upon lessons offered by relevant professional organizations and their ethics codes.
- MLIS 7700 Research Methods** **3 hours credit**  
**Prerequisite: MLIS 7000.** An introduction to the various approaches to social science research and research methods. Students will perform small-scale research projects and develop skills in the research uses of libraries and the needs of library patrons.
- MLIS 7710 Archival Theory and Issues** **3 hours credit**  
**Prerequisite or corequisite: MLIS 7000.** An introduction to archival theory and practice. The course explores archival history and the profession, including legal issues, standards and ethics, terminology and concepts, research tools, and methods and practice.
- MLIS 7800 Capstone** **3 hours credit**  
 Taken during the final semester of study. Required for partial fulfillment of the requirements for the MLIS degree. Emphasis will be on synthesis of knowledge, honing writing and presentation skills, and creating a professional development plan.
- MLIS 7950 Independent Study in Library and Information Science** **3 hours credit**  
**Prerequisite or corequisite: MLIS 7000 and consent of the instructor.** Supervised readings in areas of library and information science not normally available in regular course offerings, with regular conferences between instructor and student.
- MLIS 7960 Supervised Fieldwork** **3 hours credit**  
**Prerequisite: MLIS 7000 and consent of instructor. Graded "Satisfactory" or "Unsatisfactory."** A minimum of 120 hours in an approved library or information center. Learning objectives that are specific to the individual student's interests and goals will be identified collaboratively by the student, the on-site supervisor, and the instructor.
- MLIS 7970 Libraries and Literacy in History** **3 credit hours**  
**Also offered as HIST 7970.** An exploration of the development of reading, writing, and information management from the proto-literate stages of the ancient Near East to the present computer age. Intellectual foundations of research and librarianship will be emphasized in their historical contexts.
- MLIS 7999 Special Topics in Library and Information Sciences** **3 hours credit**  
**Prerequisite or corequisite: MLIS 7000.** Advanced study of specific issues in library and information science. Course may be repeated under different topics.

## MSED: MIDDLE GRADES AND SECONDARY EDUCATION

- MSED 7000 Professional Development Seminar I** 3-0-3  
The self-assessment of individual student understanding and application of master teacher outcomes. Provides the basis for an individual program of study based on individual needs.
- MSED 7001 Planning for Teaching** 3 hours credit  
**Prerequisite:** MGED 2999 or SEED 2999 and completion of content major courses.  
**Corequisite:** MSED 7002. Foundation for preparation for teaching and learning. The focus is on designing lessons and assessments, classroom management, effective teachers, and exceptional children. Field experience required.
- MSED 7002 Content Methods** 3 hours credit  
**Prerequisite:** Completion of content major courses. **Corequisite:** MSED 7001. Foundation for the development of a variety of teaching methods appropriate for middle and secondary education. The focus is on the organization and structuring of content for instruction. Forty hours of field experience required.
- MSED 7003 Middle and Secondary School Experiences** 3 hours credit  
**Prerequisite:** Completion of content major courses, MSED 7001, and MSED 7002. Nature and needs of the middle grades and secondary students and how contextual factors impact their development and academic success. The focus is on understanding young adults as learners, diversity in the classroom and community, individual learning styles, and special needs of exceptional children. Forty hours of field experience required.
- MSED 7004 Reading and Writing for Diverse Populations, 4-12** 3 hours credit  
**Prerequisite:** Completion of content major courses, MSED 7001, MSED 7002, and MSED 7003. Examination of current research relevant to teaching and evaluation of reading and writing in a school environment. Motivating students to read widely and developing vocabulary, reading comprehension, and study skills will be addressed in relation to the school curriculum. Forty hours of field experience required.
- MSED 7005 Teaching Internship I** 2 hours credit  
**Prerequisite:** Completion of content major courses, MSED 7001 and MSED 7002, consent of department head, and employment on a nonrenewable certificate by a school system. The first of two semester-long internships completed in a school classroom.
- MSED 7006 Teaching Internship II** 3 hours credit  
**Prerequisite:** Completion of content major courses, MSED 7001, MSED 7002, MSED 7003, MSED 7005, and consent of department head. The second of two semester-long internships completed in a school classroom.
- MSED 7007 Integrating Technology in the Content Areas** 1-0-1  
**Prerequisite:** Completion of content major courses, MSED 7001, MSED 7002, MSED 7003, and MSED 7004. Methods of integrating technology into the curriculum. The course focuses on the systematic, progressive advancement to a student-centered, technology-empowered classroom.
- MSED 7010 Current Issues and Trends in MSED** 3-0-3  
**Prerequisite:** MSED 7000. Advanced study of trends and issues in middle grades and secondary education.
- MSED 7100 Special Topics in Middle Grades and Secondary Education** 1-0-1 to 3-0-3  
Studies of selected topics in middle grades and secondary education. No more than two special topics courses may be used in a program of study.
- MSED 7020 Curriculum in Middle Grades and Secondary Education** 3-0-3  
Review of the current status and trends in middle grades and secondary curricula. Analysis of middle grades and secondary curricula and their unique construction, planning, and application.

- MSED 7030 Teaching Strategies and Assessment** 3-0-3  
Application of selected research-based instructional strategies and assessment techniques related to particular classroom contexts and student needs. Emphasis is on the student's practice and analysis of strategies and techniques in the classroom.
- MSED 7040 Evaluation and Assessment** 3-0-3  
Basic concepts, methods, and tools of assessment or evaluation. The course is designed so professional educators can combine their initial experience and understanding of students with information regarding their past performances to assess students' abilities.
- MSED 7320 Multiculturalism and Diversity** 3-0-3  
The study of methodology, materials, and evaluative strategies for teaching students of diverse cultures.
- MSED 7410 Techniques For Instructional Support** 3-0-3  
A study of techniques and models for the observation, analysis, and supervision of the teaching process. Includes communication and conferencing; self-analysis; mentoring; peer coaching; cooperative planning; and roles and responsibilities.
- MSED 7420 Internship In Instructional Support** 3-0-3  
**Prerequisite: MSED 7410 or permission of instructor. Graded "Satisfactory" or "Unsatisfactory."** A field-based demonstration of instructional supervision competencies. The student will be monitored by a university supervisor.
- MSED 7650 Teaching Practicum** 2 or 3 hours credit  
**Prerequisite: MSED 7010**
- MSED 7800 Professional Development Seminar II** 3-0-3  
**Prerequisite: MSED 7650.** Analysis of an individual's teaching plan in relationship to National Board Standards, master's program outcomes, and school improvement plans.
- MSED 8000 Special Topics in Middle Grades and Secondary Education** 2-0-2 or 3-0-3  
Studies of selected topics in middle grades and secondary education. No more than two special topics courses may be used in the sixth-year program.

#### MUE: MUSIC EDUCATION

- MUE 5100 Arranging for School Band, Chorus, and Orchestra** 2-0-2  
**Prerequisites: MUSC 2012 and 2052.** Basic techniques of scoring for school choral and instrumental groups. Three periods a week.
- MUE 5640 Music for Teachers** 3-0-3  
Music materials and methods for the elementary teacher in the school. Not open to music majors.
- MUE 7000 Issues and Trends in Music Education** 3-0-3  
Current trends and issues of contemporary music education.
- MUE 7600 Instrumental Music Curriculum** 3-0-3  
Materials and teaching techniques relative to instrumental music education.
- MUE 7610 Choral Music Curriculum** 3-0-3  
Materials and teaching techniques relative to choral music education.
- MUE 7640 General Music Curriculum** 3-0-3  
Review of current methods and approaches of general music education, including multicultural approaches to music teaching.
- MUE 7680 Foundations of Music Education** 3-0-3  
Historical, philosophical, and sociological foundations of music education.
- MUE 7900 Directed Study in Music Education** 1-0-1 to 3-0-3

**MUE 7999 Thesis** 3-0-3  
**Prerequisite: Completion of the required core courses in education and music.** A capstone research course resulting in the proposal and preparation of a thesis. A defense of the thesis is required.

### MUSC:MUSIC

**MUSC 5110 Jazz Arranging** 2-0-2  
**Prerequisite: MUSC 2012 and 1172, or permission of instructor.** The application of analytic techniques to the study of musical scores.

**MUSC 5170 Music Composition I** 1-0-1  
**Prerequisite: MUSC 1012 or permission of the instructor.** Foundations in music composition employing both traditional and contemporary techniques.

**MUSC 5430 History of Jazz** 2-0-2  
**Prerequisite: MUSC 2172 or permission of the instructor.** A comprehensive study of the development of jazz from its origins through present day. The course emphasizes the evaluation of stylistic trends and techniques.

**MUSC 5500 Band Literature** 1-0-1  
**Prerequisite: MUSC 1100.** Study of styles and eras of band literature appropriate for a variety of ensembles.

**MUSC 5510 Choral Literature** 1-0-1  
**Prerequisite: MUSC 1100.** Study of styles and eras of choral literature appropriate for a variety of ensembles.

**MUSC 5520 Symphonic Literature** 2-0-2  
**Prerequisite: MUSC 1100.** A survey of Western symphonic music.

**MUSC 5960 Opera Seminar** 1-0-1  
The study and analysis of scenes from opera and operetta.

**MUSC 6450 History of Music to 1750** 3-0-3  
**Prerequisite: MUSC 1100 or permission of instructor.** A survey and study of the various historical developments and movements in music from the medieval times through the baroque era.

**MUSC 6460 History of Music Since 1750** 3-0-3  
**Prerequisite: MUSC 1100 or permission of instructor.** A survey and study of the various historical developments and movements in music from the classical period through the 20th century.

**MUSC 6510 Song Literature I** 2-0-1  
Survey course in art song literature. MUSC 6510 peruses the literature from the Renaissance through the German Lieder School spanning the 19th century and the first half of the 20th century.

**MUSC 6520 Song Literature II** 2-0-1  
Survey course in art song literature. MUSC 6520 peruses the 19th and 20th century French, Spanish, English, and American song schools.

**MUSC 6540 Piano Literature I** 1-0-1  
Survey course in piano literature. The keyboard instruments and literature of the Renaissance, Baroque, and Classical eras.

**MUSC 6550 Piano Literature II** 1-0-1  
Survey course in piano literature. The piano literature of the Romantic period and representative repertory of the last 100 years.

<b>MUSC 6570 Organ Literature I</b>	1-0-1
The study of organ literature and organ design from the origins of the instrument to the time of J. S. Bach.	
<b>MUSC 6580 Organ Literature II</b>	1-0-1
The study of organ literature and organ design from the time of J. S. Bach to the present.	
<b>MUSC 6760 Jazz Pedagogy</b>	1-0-1
The study of jazz methods and jazz materials, including lab teaching experience.	
<b>MUSC 7010 Music Theory</b>	3-0-3
Graduate survey in music theory.	
<b>MUSC 7020 Music History</b>	3-0-3
Graduate survey in music history.	
<b>MUSC 7040 Computer Applications in Music</b>	3-0-3
This course is an introduction to the basic skills in computer applications for music, including MIDI (Musical Instrument Digital Interface).	
<b>MUSC 7530 Chamber Music</b>	3-0-3
Selected studies in the history and theory of chamber music masterworks.	
<b>MUSC 7650 Conducting</b>	3-0-3
Techniques in conducting.	

### APPLIED MUSIC (MUSC)

Student enrolling in Applied Music will be assigned to an instructor by the Head of the Music Department, and a list of assignments will be posted in the Music Department Office on the day following registration. Student must arrange for a lesson time with the assigned instructor by the end of the second day of classes. Students not scheduled by the end of the second day of classes will be dropped from the course.

**Secondary Applied:** These courses award one credit hour each semester, and one thirty-minute lesson will be scheduled each week. Requirements will be determined by the instructor. Secondary applied lessons are available to any student regardless of major, depending on the availability of faculty.

#### Secondary Applied

<b>MUSC 5210 Piano</b>	<b>Graduate</b>	0-1-1
<b>MUSC 5310 Organ</b>	<b>Graduate</b>	0-1-1
<b>MUSC 5410 Voice</b>	<b>Graduate</b>	0-1-1
<b>MUSC 5610 Brass</b>	<b>Graduate</b>	0-1-1
<b>MUSC 5910 Woodwinds</b>	<b>Graduate</b>	0-1-1
<b>MUSC 6310 Percussion</b>	<b>Graduate</b>	0-1-1
<b>MUSC 6410 Strings</b>	<b>Graduate</b>	0-1-1
<b>MUSC 5810 Chamber Singers</b>		0-2-1
A selected ensemble emphasizing choral and vocal chamber music repertoire. Selection by audition only. Membership open to all VSU graduate students.		
<b>MUSC 5820 Concert Choir</b>		0-3-1
Open to any VSU student by permission of the instructor.		



<b>MUSC 5830 The Spotlighters</b>	0-2-1
A select choral ensemble emphasizing popular, jazz, blues, and show tune repertoire. Selection by audition only.	
<b>MUSC 5840 Opera and Musical Theatre</b>	0-2-1
Music drama production and ensemble work. Preparation of scenes and full-scale productions.	
<b>MUSC 5850 Concert Band</b>	0-3-1
Open to any VSU student by permission of the instructor.	
<b>MUSC 5860 Orchestra</b>	0-3-1
Open to VSU students with permission of the instructor.	
<b>MUSC 5870 Jazz Ensemble</b>	0-3-1
Selection by audition only.	
<b>MUSC 5880 Marching Band</b>	0-3-1
Performance at all football games and various exhibitions. Auditions required for danceline, color guard, and majorette. Fall semester only.	
<b>MUSC 5890 Instrumental Ensembles</b>	0-2-1
Study and performance of repertoire for a variety of combinations of instruments. Open by permission of instructor.	
<b>MUSC 6870 Jazz Combo</b>	0-2-1
Study and performance of a wide variety of jazz styles for 5-8 member ensemble. Selection by audition only.	
<b>MUSC 6880 University Community Band</b>	0-3-1
Study and performance of standard band literature. Open to VSU students and members of the community by permission of the instructor.	
<b>MUSC 6890 Vocal Chamber Ensembles</b>	0-1-1
Ensemble performance in musicals, opera, and other such events in conjunction with the departments of music and theatre.	
<b>MUSC 7050 Music Research and Bibliography</b>	2-0-2
Development of graduate-level research skills.	
<b>MUSC 7240 Private Piano</b>	<b>4 credit hours</b>
Applied private piano lessons for graduate students. Students will receive two 50-minute lessons each week and attend studio class, recitals, and other designated events as assigned in applied instruction. May be repeated for credit.	
<b>MUSC 7340 Private Strings</b>	<b>4 credit hours</b>
Applied or private string lessons for graduate students. Two 50-minute lessons scheduled each week. May be repeated for credit.	
<b>MUSC 7440 Private Voice</b>	<b>4 credit hours</b>
Private or applied voice lessons for graduate students. Classroom requirements are two 50-minute lessons and a studio class each week. May be repeated for credit.	
<b>MUSC 7450 Private Percussion</b>	<b>4 credit hours</b>
Applied or private percussion lessons for graduate students. Two 50-minute lessons will be scheduled each week. May be repeated for credit.	
<b>MUSC 7640 Private Brass</b>	<b>4 credit hours</b>
Applied or private brass lessons for graduate students. Students receive two 50-minute lessons each week and attend studio class, recitals, and other designated events as assigned by the applied instructor. May be repeated for credit.	
<b>MUSC 7721 Advanced Piano Pedagogy</b>	0-2-1
An in-depth study of piano pedagogy designed to enhance instructional skills in private and group settings.	
<b>MUSC 7722 Advanced Piano Pedagogy II</b>	0-2-1
The second of two in-depth studies of piano pedagogy designed to enhance instructional skills in private and group settings.	

- MUSC 7731 Advanced Percussion Pedagogy** 0-2-1  
An in-depth study of percussion pedagogy designed to enhance instructional skills in private and group settings.
- MUSC 7732 Advanced Brass Pedagogy** 0-2-1  
An in-depth study of brass pedagogy designed to enhance instructional skills in private and group settings.
- MUSC 7733 Advanced Woodwind Pedagogy** 0-2-1  
An in-depth study of woodwind pedagogy designed to enhance instructional skills in private and group settings.
- MUSC 7734 Advanced String Pedagogy** 0-2-1  
An in-depth study of string pedagogy designed to enhance instructional skills in private and group settings.
- MUSC 7750 Advanced Vocal Pedagogy** 0-2-1  
An in-depth study of vocal pedagogy designed to enhance instructional skills in private and group settings.
- MUSC 7840 Private Conducting** 4 credit hours  
Applied private conducting at the graduate level. Techniques of conducting, including refinement of physical and artistic gestures. May be repeated for credit.
- MUSC 7900 Directed Study in Music Performance** 0-2-1 to 0-6-3  
The opportunity to earn academic credit for a performance or performance-based project not otherwise included in the curriculum offerings. Credit hours to be determined by the instructor, Graduate Music Coordinator, and the Department Head.
- MUSC 7940 Private Woodwinds** 4 credit hours  
Applied of private woodwind instruction for graduate students. Students receive two 50-minute lessons each week and attend studio class, recitals, and other designated events as assigned by the applied instructor. May be repeated for credit.

## NURS: NURSING

- NURS 5050 Field Study in Transcultural Care** 1-3-2 to 1-21-8  
Focuses on the application of concepts of transcultural nursing in selected culturally diverse settings. Students are encouraged to explore personal cultural orientation and its influence on the delivery of care and services. Selected ethnocultural groups will be studied. Variability will occur in undergraduate and graduate study intensity (concentration and length of study).
- NURS 5990 End-of-Life Nurturing** 3-0-3  
**Also offered as NUTR 5990.** The study of the meaning of death, dying, and grieving across cultures and life development stages. The course focuses on end-of-life issues such as death as a process to attain life fulfillment, nurturing behaviors (providing nourishment, hydration, and care giving), cultural and spiritual perspectives, and legal and ethical concerns related to quality-of-life decisions.
- NURS 7010 Integration of Conventional / Alternative Therapies** 3-0-3  
Explores conventional & alternative healings therapies from various philosophical perspectives and how they are being blended with mainstream western medicine to determine how a program of wellness can be maintained toward empowerment of a healthy life-style and directed self care. Focuses on healing into wholeness with the Bio-Psycho-Spiritual model.
- NURS 7011 Statistical Applications In Nursing Research and Practice** 3-0-3  
Emphasizes application of appropriate descriptive and inferential statistical procedures using numerous examples of nursing research and practice data. Selection of correct statistical procedures, analysis of data, and interpretation of statistical results are discussed. This course is required for graduate nursing students who have not completed undergraduate statistics.

- NURS 7020 Family Nursing** 3-0-3  
Examines the biophysical, psychosocial, culture, intellectual, and spiritual nature of health and illness within families. Forces for health or illness, dynamics of family health, and helping relationships with families are explored.
- NURS 7060 Directed Study in Nursing** 1 to 5 credit hours  
Enables the student to explore in depth a topic relevant to his/her special interest in nursing.
- NURS 7070 Special Topics in Advanced Nursing** 1 to 5 credit hours  
Provides opportunities for study on topics of interest in advanced nursing practice.
- NURS 7100 Clinical Pathophysiology** 3-0-3  
**Prerequisites: Graduate standing.** Provides advanced principles of human physiology and pathogenesis of diseases. Emphasis is on etiology, pathogenesis and clinical manifestations of disease processes commonly encountered in advanced nursing practice.
- NURS 7110 Theories Used in Nursing** 2-0-2  
**Prerequisites: Graduate standing.** Analysis of concepts, models, and theories; both nursing theories and others used in nursing. Emphasis is on use of theory in advanced nursing practice, education, management, and research.
- NURS 7120 Nursing Research** 3-0-3  
**Prerequisite: Statistics. Pre- or Co-requisite: NURS 7110.** The study of principles and design of nursing research. Quantitative, qualitative, and epidemiological methods are considered. Emphasis is on significant problem formulation, methods of investigation, results, conclusions, and strategies for nursing implementation by the development of a research paper.
- NURS 7130 Seminar in Issues and Health Policy** 0-3-1  
**Prerequisite: Graduate standing.** Analysis of trends and issues which impact client health and health care delivery systems. Professional activities which positively effect policy and polity are explored.
- NURS 7140 Leadership in Advanced Nursing Roles** 3-0-3  
This course provides the student with leadership and management skills for advanced nursing roles. Various advanced nursing roles will be explored with emphasis on leadership and management strategies to overcome barriers and enhance nursing practice in a changing health care environment.
- NURS 7211 Advanced Nursing Care with Growing Families** 3-9-6  
**Prerequisites: NURS 7110 and NURS 7100.** Applies specialized knowledge and current research to competent caring of childbearing and child rearing families. Explores the effects of sociocultural issues and environmental on the well-being of children and their families. Identifies the common health problems of childbearing and child rearing and appropriate interventions to promote holistic health and development. Clinical experiences focus on the application of advanced practice theory to childbearing and child rearing families within multiple settings and emphasizing health promotion of growing families.
- NURS 7230 Pharmacotherapeutics** 3-0-3  
**Prerequisite: NURS 4060 or demonstrated competence.** The study of pharmacokinetic processes and drugs used in advanced practice of nursing. Legal considerations of prescriptive privileges are incorporated into the selection of appropriate drugs and dosages for client problems. Students compile a drug protocol manual as part of the learning process.
- NURS 7231 Advanced Nursing for Health Promotion of Adults** 3-9-6  
**Prerequisites: NURS 7110 and NURS 7100.** Focuses on holistic and comprehensive nursing care of multicultural adult populations utilizing current research and theoretical concepts related to health promotion and disease prevention. Clinical experiences focus on the application of theory in a variety of settings.

- NURS 7251 Mental Health Nursing with Person** 3-9-6  
**Prerequisites:** NURS 7100 and NURS 7110. Explores psychodynamic, behavioral, developmental and humanistic approaches to helping processes for individuals in crisis. Incorporates a worldwide and multicultural perspective. Emphasis is on developing competencies as a nurse counselor caring for clients with acute and chronic episodes of emotional distress. Clinical experience focuses on development of skills needed to modify individual behavior toward balance, adaptation, and holism.
- NURS 7291 Advanced Nursing Health Promotion of Adults** 0-9-3  
**Clinical Laboratory-NP**  
**Prerequisites:** NURS 7100 and NURS 7110. **Co-requisite:** NURS 7231. Application of advanced practice theory related to wellness and health promotion and lifestyle modification within role-specific settings. This clinical experience is for students in the nurse practitioner track.
- NURS 7312 Advanced Nursing Care with Growing Families During Health Crisis** 3-9-6  
**Prerequisite:** NURS 7211. Explores the specialized knowing required for holistic care of childbearing and child rearing families in crisis. Epidemiologic methods are utilized to identify the health hazards of each stage of childbearing and child rearing and to prioritize appropriate interventions. Emphasis is on competent nursing care during acute illness and promotion of health during long-term problems. Incorporates evaluation of research and theories appropriate to the health status of client families. Clinical experiences focus on the application of advanced practice theory within settings which care for families undergoing health crisis.
- NURS 7321 Curriculum Design for Nursing** 2-3-3  
**Prerequisites:** Clinical Focus Courses. Focuses on the historical and current theories and trends in curricular development. Students will explore curricular designs, implementation issues, course development, and program evaluation issues related to nursing education. Laboratory experiences include activities such as curriculum meetings, classroom and clinical observation/evaluation, and development of a prototype nursing curriculum.
- NURS 7331 Nursing Administration: Role and Theories** 2-3-3  
**Prerequisites:** Clinical Focus Courses. Presents theoretical role, functions, strategies, and techniques used for leading, managing and administrating the nursing function in a variety of settings. Provides a clinical component in which the roles of the nurse administrator as a leader for creative nursing practice, as a colleague with other health care administrators, and as a nursing spokesman interacting with others of influence in the health care system are examined.
- NURS 7332 Advanced Nursing for Health Restoration of Adults** 3-9-6  
**Prerequisite:** NURS 7231. **Corequisite:** NURS 7332K Focuses on holistic and comprehensive nursing care of multicultural adult populations utilizing current research and theoretical concepts related to health restoration. Concepts include advanced nursing care of acute and chronic illnesses common to adult multicultural populations. Clinical experiences focus on the application of theory in a variety of settings.
- NURS 7341 Care Manager: Role and Theories** 2-3-3  
**Prerequisite:** Completion of Clinical Focus Courses. Explores the concept and models of care management within the context of the current and evolving health care environment. Examines the relationship of care management, managed care, and patient/family holistic care needs. Clinical experiences provide the opportunity to analyze care management strategies for quality and cost effectiveness and to explore development of the nursing care management role.
- NURS 7352 Mental Health Nursing with Persons** 3-9-6  
**Prerequisite:** NURS 7251. Explores multiple theoretical approaches for positive growth in groups and family systems. Counseling competencies with groups and families to catalyze effective change/adaptation toward holistic mental health are emphasized. Clinical experience is focused on developing effective counseling skills with groups and families.

- NURS 7391 Nurse Practitioner–Diagnostic and Therapeutic** 2-6-4  
**Pre- or co-requisite:** NURS 7231. Holistic and comprehensive nursing care within the role of the nurse practitioner. Emphasis will be on the identification and management of the health care needs of adults. Research related to the role of advanced practice as a nurse practitioner is applied. Clinical experience is focused on application of principles related to diagnostic modalities and therapies for common health problems.
- NURS 7392 Advanced Nursing for Health Restoration of Adults**  
**Clinical Laboratory - NP** 0-9-3  
**Prerequisite:** NURS 7291. **Co-requisite:** NURS 7332. The application of advanced practice theory related to assessment and health promotion within role-specific settings. This clinical experience is for students in the nurse practitioner track.
- NURS 7422 Teaching Strategies for Nursing** 1-15-6  
**Prerequisite:** NURS 7321. Focuses on the theoretical concepts related to nursing education. Students will explore, develop, and implement a variety of teaching strategies. Laboratory hours will be spent in mentorship relationships with nursing faculty as a novice educator in classroom and clinical settings.
- NURS 7432 Nursing Administration: Implementation of Role** 1-15-6  
**Prerequisite:** NURS 7331. Synthesizes knowledge of the health care system, theories of administration and organization, nursing theories, role theory, issues, trends, financial and policy development, and research in health care systems into practice. The clinical practicum experience develops beginning competencies as a nurse administrator in health care systems.
- NURS 7442 Care Manager: Nursing Role Development and Implementation** 1-15-6  
**Prerequisite:** NURS 7341. Explains the development, implementation, and evaluation of care management models and plans. Explores the relationship between care management, quality improvement, and holistic care. Identifies strategies for measuring, evaluating, and assessing care management outcomes. Clinical experiences provide the opportunity to design and implement care management strategies.
- NURS 7460 Financial Management for Nurses** 3-0-3  
**Prerequisites: Clinical Focus Courses.** Provides an overview of financial management topics such as accounting, economics, strategic planning, decision making tools, and marketing in order to prepare the senior or mid-level health care manager for a collegial relationship with their financial manager. Open to all graduate students in nursing.
- NURS 7463 Thesis** 1 to 6 credit hours  
**Prerequisite:** NURS 7120. The research process is utilized to investigate a nursing question.
- NURS 7473 Project** 1 to 6 credit hours  
**Prerequisite:** NURS 7120. **Graded “Satisfactory” or “Unsatisfactory.”** An independent study to develop a nursing project of the student’s choice under the supervision of a faculty member. Course will be graded “IP,” “S,” or “U,” as appropriate.
- NURS 7492 Nurse Practitioner–Therapeutic Interventions and Role Implementation** 1-15-6  
**Prerequisite:** NURS 7391. Synthesis of concepts and generation of research issues related to the role of the nurse practitioner. Emphasis is on provision of holistic nursing in the supervised role of adult nurse practitioner within a variety of settings.
- NURS 7590 Nurse Practitioner Practicum** 0-18-6  
**Prerequisite:** NURS 7391, NURS 7492, NURS 7230. **Co-requisite:** NURS 7594. Clinical practicum focused on the synthesis and application of advanced practice theory for nurse practitioners within a variety of settings. Emphasis is on developing competence as a primary health care provider.
- NURS 7594 Synthesis Seminar** 0-6-2  
**Co-requisite:** NURS 7590. Synthesis and application of knowledge required to function as a competent nurse practitioner. Students explore ethics, marketing, practice management, and standards of practice for the nurse practitioner.

## NUTR: NUTRITION

- NUTR 5250 Special Topics in Nutrition** 3-0-3  
**Prerequisite: Basic nutrition course or permission of the instructor.** An intensive study in any area of student interest related to nutrition or a current topic relevant to nutritional science or complementary nutrition care. Topics may vary depending on selected area of nutrition.
- NUTR 5900 Culture, Food, and Health** 3-0-3  
An examination of different cultural/ethnic/religious groups around the world and within the U.S., their food choices, nutritional practices, and beliefs related to health. This course focuses on cultural perspectives as well as traditional and contemporary food habits among different peoples.
- NUTR 5910 Botanical and Complementary Healing Practices** 2-2-3  
Introductory exploration of botanical and alternative healing practices. This course focuses on herbal and dietary measures used by different cultures to attain balance and wholeness as well as other healing techniques that address the body-mind-spirit connection. Students are provided an opportunity for hands-on application of selected healing techniques and experiential learning.
- NUTR 5990 End-of-Life Nurturing** 3-0-3  
**Also offered as NURS 5990.** The study of the meaning of death, dying, and grieving across cultures and life development stages. The course focuses on end-of-life issues such as death as a process to attain life fulfillment, nurturing behaviors (providing nourishment, hydration, and care giving), cultural and spiritual perspectives, and legal and ethical concerns related to quality-of-life decisions.
- NUTR 6000 Advanced Nutritional Therapy** 3-0-3  
Explores physiological responses at the cellular level to inadequate and excessive nutrients in culturally diverse clients throughout the lifespan. The course incorporates advanced nutritional assessment. Emphasis is on providing nutritional support and dietary modifications for primary, secondary, and tertiary prevention, consistent with the cultural milieu.
- NUTR 6900 Life Cycle Nutrition** 3-0-3  
A study of nutritional needs and factors that influence health from birth through old age. The course focuses on physiological and biochemical principles that provide the basis for nutritional requirements throughout the life cycle for optimal growth and development, maturation, and aging.
- NUTR 6950 Community Nutrition and Health** 2-2-3  
**Prerequisites: PERS 2430 or NUTR 3100, NURS 3220 or NURS 3250, or permission of the instructor.** Focus is on involvement in community health and nutritional programs and problems. The course emphasizes application and utilization of tools to assess, analyze, and design programs to meet the nutritional and health needs of multicultural communities. It also explores the roles of research and government as they impact nutritional, health, and wellness programs.
- NUTR 7070 Nutrition for Physical Activity** 3-0-3  
**Prerequisite: Basic undergraduate nutrition course.** Emphasis on meeting the nutritional needs of physically active individuals, application of nutritional assessment, and physiological responses to physical activity. Information concerning sports nutrition guidelines for special population groups participating in physical exercise, dietary modifications for optimal physical performance throughout the life-span, and health promotion along with cultural diversity will be included.

## PADM: PUBLIC ADMINISTRATION

- PADM 7000 Human Resource Management** 3-0-3  
A study of Human Resource Management. This course examines the processes of personnel administration and relates them to the human resource needs of organizations.
- PADM 7010 Public Sector Labor Relations** 3-0-3  
An analysis of labor relations in public organizations. Topics include dispute resolution, management of benefit packages, and other current issues of labor relations.
- PADM 7020 Public Sector Planning** 3-0-3  
An exploration of the elements of public sector planning, including data validation, forecasting and projection techniques, and decision making.
- PADM 7040 Non-Profit Management** 3-0-3  
A survey of the types, methods, and techniques of management of organizations outside the dualistic public and private sector model. Emphasis is on revenue strategies, structure and control.
- PADM 7050 Administrative Law and Government** 3-0-3  
An overview of the administrative legal processes, focusing on the formation and execution of public policy. Special emphasis is placed upon protecting the rights of all parties in the complex processes of administrative law, policy formation, and implementation.
- PADM 7060 Quantitative Methods for Public Administration** 3-0-3  
The application of quantitative methods to problems faced by public administration practitioners. Topics include regression analysis and the use of probability theory as they apply to decision making in public management.
- PADM 7090 Policy Analysis** 3-0-3  
**Prerequisite: PADM 7060.** A systematic survey of the theories, basic concepts and approaches associated with empirical analysis of public policies. Topics include problems and uses of analysis, with reliance on case studies.
- PADM 7110 Information Management** 3-0-3  
**Also offered as MLIS 7270.** A survey of the issues and problems of information management. Emphasis is on modern developments in the generation, storage, classification and transmission of information vital to the management of public organizations.
- PADM 7120 Accounting for the Public Sector** 3-0-3  
A study of the role accounting plays in the overall management process within public agencies. Emphasis is given to the use of accounting techniques as a means of assuring proper control over funds entrusted for public purposes.
- PADM 7140 Governmental Budgeting and Finance** 3-0-3  
An analysis of financial management and budgeting procedures as applied to federal, state and local governments.
- PADM 7170 Organizational Theory and Behavior** 3-0-3  
An introduction to major theories concerning management in the public sector, including analysis of individual behavior in an organizational context. Emphasis is on the politicized environment.

Most credit notations on the far right are in the pattern 3-0-3. The first number is the number of lecture hours (or equivalent) each week; the second number is the number of laboratory hours (or equivalent) each week; the third number, **in bold**, is the number of semester hours credit.

- PADM 7180 Labor Law** 3-0-3  
An examination of modern labor movements in the United States, with special attention to the National Labor Relations Act and other fair employment practices acts. Attention will also be focused on the laws of unionization, collective bargaining, strikes, and picketing.
- PADM 7190 Special Topics in Public Administration** 3-0-3  
Study in areas which are not ordinarily covered in the MPA Program, but which may be of contemporary or special interest to MPA students at the time.
- PADM 7200 Directed Study in Public Administration** 1-0-1 to 3-0-3  
Directed readings in selected areas of public administration with regular conferences between the student and the faculty member.
- PADM 7210 Internship in Public Administration** 1-0-1  
**Corequisite: PADM 7900. Graded “Satisfactory” or “Unsatisfactory.”** A one-semester internship in public or not-for-profit agency to be taken during student’s final semester of course work. The internship is designed to gain practical experience in the field of public administration. A written report or a portfolio development is required.
- PADM 7220 Managing Diversity in the Public Workforce** 3-0-3  
An overview of diversity issues in public management from a human resource manager’s perspective. Topics include differences in age, disability, gender, race/ethnicity, and culture and their impact on human resource management.
- PADM 7240 Public Administration and Community-Based Organizations** 3-0-3  
An examination of the relationships between urban public administrators and their environment. Topics include but are not limited to the role community organizations, interest groups, and demographic diversity upon the management function.
- PADM 7250 Managing Small Cities and Counties** 3-0-3  
An overview of local government operations for small and mid-sized communities. Topics include legal issues, the clerk’s office, emergency management, planning, economic development, public works, leisure and human services, police and fire services, budgeting and financial management, personnel, communication, and intergovernmental relations.
- PADM 7260 Democracy and Public Administration** 3-0-3  
An examination of the role of the career administrator in an democratic system. Topics include the nature of the American democratic system and the ethical implications of non-elected administrators playing a key role in the system.
- PADM 7270 Innovation and Creative Problem Solving in the Public Sector** 3-0-3  
An exploration of innovation, problem solving, and creativity as applied to the public sector. The course seeks to expand class participants’ understanding and abilities in each of these areas.
- PADM 7300 Foundations Seminar in Public Administration** 3 hours credit  
**Graded “Satisfactory” or “Unsatisfactory.”** A survey of the field of public administration, including the research and writing skills needed for successful study in the field. The course is to be taken during the student’s first semester of coursework. Students must demonstrate basic computer proficiency as part of this course.
- PADM 7340 Managing Local Government Finance** 3-0-3  
A study of the activities involved in the collection, custody, and expenditure of public revenues at the local level.
- PADM 7350 Intergovernmental Management** 3 hours credit  
A study of federal, state, and local government interactions, including interactions with the not-for-profit sector, from the perspective of a public administrator.
- PADM 7860 Grant Writing and Management** 3 hours credit  
An examination of the process of acquiring and managing grants in the public sector. Emphasis is on demonstrating knowledge of grant strategies and procedures gained through course material and completion of a case study.



- PADM 7900 Capstone Seminar in Public Administration** 2-0-2  
**Co-requisite: PADM 7210. Graded “Satisfactory” or “Unsatisfactory.”** To be taken during the student’s final semester of course work. An Internet-based course. Students are expected to demonstrate mastery of the material presented in their program of study through case analyses. This course serves as the exit requirement for the MPA program.
- PADM 9000 Administration and Government** 3-0-3  
 A survey of the history and development of public administration and the institutions of government. This course is designed to introduce students to the social, political, and institutional context of public administration. Topics include democracy, federalism, and administrative theory.
- PADM 9010 Financial Management for Public and Non-Governmental Organizations** 3-0-3  
 A review and assessment of current practices and theory in public finance administration. The applicability of key public theories is analyzed in terms of their use within governmental and not-for-profit (NPO) settings. Specific attention is paid to applying theory as a standard of judgment in assessing the quality of governmental and NPO financial and budgetary structures and activities.
- PADM 9020 Managing Human Resources in Public and Non-Governmental Organizations** 3-0-3  
 A focus on human resource management in public and non-governmental organizations, including the standards that government bureaucracies have set for personnel practices in areas of diversity, equal opportunity, merit, and fair labor compensation that have been adopted in the private and non-governmental sectors.
- PADM 9030 Logic of Inquiry in Administration** 3-0-3  
 An in-depth examination of the various epistemological approaches used in the systematic study of public administration.
- PADM 9040 Research and Methods for Public Administration** 3-0-3  
**Prerequisite: PADM 9030.** An in-depth examination of the research methods used in the study of public administration. The course will expose students to the research methodologies available to modern public administrators and academics and to the software packages available to analyze data concerning various questions important to political scientists. The course will help students acquire the capability to critically examine empirical research and facilitate their ability to develop and carry out a complete empirical research project.
- PADM 9050 Program Evaluation** 3-0-3  
**Prerequisite: PADM 9040. Also offered as PSYC 9050.** Theories, research, and practice related to program evaluation in government and nonprofit organizations.
- PADM 9060 Information and Data Management** 3-0-3  
 An examination of technology and information management, including hardware, software, and systems development. Particular emphasis will be placed on the management of information resources within the public sector and the role of E-Government.
- PADM 9070 Culture of Formal Work Organizations** 3-0-3  
**Also offered as SOCI 9070.** The study of organizational culture and methods of changing culture in public and nonprofit organizations. The impact of culture on organizational behavior will be discussed.
- PADM 9090 Educational Policy Analysis** 3-0-3  
**Prerequisites: Doctoral standing or approval of instructor.** A systematic survey, of the theory, concepts and approaches associated with empirical analysis of public educational policies in a multicultural environment. Topics include quantitative and qualitative tools and methods of analysis. The case studies approach is utilized.

- PADM 9990 Capstone Seminar** 3-0-3  
**Graded “Satisfactory” or “Unsatisfactory.”** The concluding seminar in the DPA program, to be taken during a student’s final semester. Students will demonstrate mastery of the material presented in their programs of study through a variety of methods and will present a professional portfolio. Students will develop and defend the proposal for their final project or organizational analysis.
- PADM 9999 Final Project/Organizational Analysis** 6 hours credit  
**Prerequisites: Completion of major courses and permission of advisor or final project chair. Graded “Satisfactory” or “Unsatisfactory.”** Development and defense of the final project or organizational analysis. Under the supervision of a faculty committee, students will conduct either an applied research project or a descriptive and prescriptive evaluation of the management policies of an agency. Course may be repeated for credit.

### **PHIL: PHILOSOPHY**

- PHIL 5100 Ethics and Health Care** 3-0-3  
 A study of ethical issue in health care delivery, with special emphasis on topics such as abortion, euthanasia, paternalism and autonomy, confidentiality, medical experimentation and informed consent, allocation of scarce resources, and the right to health care.
- PHIL 5150 Ethics and Business** 3-0-3  
 A study of ethical issues in business and society, with special emphasis on corporate responsibility, regulation of business, and the protection of workers, consumers and the environment.
- PHIL 5190 Ethics and the Social Sciences** 3-0-3  
 A study of ethical issues in the social sciences, with special emphasis on issues such as human and animal experimentation, counseling, behavior control, punishment, psychological and sociological determination, and gender and racial discrimination.
- PHIL 6120 Ethics and Public Policy** 3-0-3  
 A study of ethical issues involved in public policy, with special emphasis on issues such as affirmative action, abortion, euthanasia, capital punishment, free speech and privacy.
- PHIL 6220 Ethics and Public Administration** 3-0-3  
 A study of ethical issues in public administration, with special emphasis on developing analytical skills in ethical decision-making in the public sector, highlighting the role of ethics and professional responsibility in public service, and identifying situations involving professional malfeasance such as conflict of interest.
- PHIL 7100 Topics in Ethics and Sport** 3-0-3  
 A seminar in ethical issues in sports and contemporary society.
- PHIL 7900 Topics in Philosophy** 3-0-3  
 A special topics course, designed to address a selected topic for research analysis.
- PHIL 9070 Philosophy of Education** 3-0-3  
 A systematic analysis of topics central to educational philosophy, including theories of education, logic, critical thinking and scientific method, and ethical issues in education. Seminar discussions and case studies are utilized, as is World Wide Web Internet technology.

## PHSC: PHYSICAL SCIENCE

- PHSC 5010 Experimental Physical Science** 2-4-4  
This course covers the basic principles of physical science, and how apparatus can be built from commonly available materials in order to demonstrate these principles.
- PHSC 5050 Observational Astronomy** 2-4-4  
A study of the observation of celestial objects visible to the unaided eye, with astronomical photography, the position and motion of objects in the sky, locating celestial objects with the telescope and the use of star charts. The course consists of about 25 hours of lecture and 50 hours of laboratory work.

## PHYS: PHYSICS

- PHYS 5040 Electronics** 2-4-4  
A lecture-laboratory study of basic electrical circuits and techniques, including extensive use of the oscilloscope. Both continuous wave and pulse phenomena are treated.
- PHYS 5100 Optics** 2-2-3  
An intermediate level course with emphasis on physical optics. Topics include interference, polarization, dispersion, absorption, resonance and quantum effects. The electromagnetic nature of light is emphasized.
- PHYS 5810 Mathematical Methods of Physics** 3-0-3  
Special topics in mathematics as related to advance study in physics. Topics include vector analysis, differential equations, orthogonal functions, eigenvalue problems, matrix methods, and complex variables.
- PHYS 5820 Computational Physics** 3-0-3  
Topics include formulation of equations describing physical systems and the use of computers to solve them, computer simulations of physical systems, the use of computers to acquire and analyze data, and graphical methods of displaying data.
- PHYS 6040 Experimental Physics** 2-4-4  
A lecture-laboratory course devoted to techniques of research in experimental physics. Topics include treatment of data, vacuum techniques, magnetic devices, preparation and manipulation of beams of particles and radioactivity. A number of modern physics experiments are studied and performed.
- PHYS 6111-6112 Theoretical Mechanics I, II** 3-0-3 each  
Topics include Newtonian Mechanics, conservation laws, Lagrange's equations, and relativity.
- PHYS 6211-6212 Electromagnetism I, II** 3-0-3 each  
Topics include electrostatics, magnetostatics, time varying electric and magnetic fields, Maxwell's equations, and propagation of electromagnetic waves.
- PHYS 4310 Thermodynamics** 3-0-3  
**Prerequisite:** MATH 2263, PHYS 2211K. Basic principles of classical thermodynamics, which includes open and closed systems for both steady and transient processes.
- PHYS 6411-6412 Modern Physics, I, II** 3-0-3 each  
An introduction to twentieth-century physics with the emphasis on quantum mechanics and its applications to atomic and nuclear structure, and to solid state physics. Both wave and matrix formalisms are developed, along with their experimental implications.
- PHYS 6800 Internship in Physics** 0-6-3 to 0-12-6  
Active participation in research in physics or in a field of science closely allied with physics, such as biophysics. A daily log of activities, a report on the work done, and a research paper relating the work done to the field of physics are required.

- PHYS 6900 Special Topics in Physics** 1-0-1 to 4-4-6  
 Topics to be assigned by instructor; may be taken more than once if topics are different, up to a total of 6 credit hours.
- PHYS 6950 Directed Study in Physics** 1-0-1 to 4-4-6  
 Study in area or subject not normally found in established courses offered by the department; may also allow student to explore in more detail and/or depth an area or subject covered by the department in physics. Up to a maximum of 12 credit hours.

### **POLS: POLITICAL SCIENCE**

- POLS 5200 American State and Local Government and Politics** 3-0-3  
 A study of American subnational governments and politics with special emphasis upon intergovernmental relations.
- POLS 5210 The American Legislative Process** 3-0-3  
 A study of the legislative process in the United States, focusing primarily on Congress and the state legislatures. Course topics will include elections for legislative offices and the interaction between the legislature and the executive branch. The roles of parties and leaders in the legislative process will be examined.
- POLS 5300 Comparative Politics** 3-0-3  
 A study of the key concepts and theories of comparative politics. Examines case studies from different types of political systems and regions of the world.
- POLS 5400 International Politics** 3-0-3  
 A study of key concepts and theories of international politics. Examines the evolution of the contemporary international system and conflict and cooperation among nation-states.
- POLS 5500 Western Political Theory I** 3-0-3  
 An examination of the teachings of the classical period of political theory from early Greeks through the political writings of Thomas Aquinas.
- POLS 5510 Western Political Theory II** 3-0-3  
 An examination of the normative teachings of modern political theory beginning with Machiavelli up to the writings of John Stuart Mill.
- POLS 5520 Modern Political Ideologies** 3-0-3  
 An exploration of the dominant political ideologies that shape decisions about and understanding of political events, including but not limited to capitalism, socialism, communism, patriarchy, feminism, environmentalism, liberation theology, liberalism, populism, and nationalism.
- POLS 5530 American Political Thought** 3-0-3  
 A study of the foundations of American political thought from the Puritan era to contemporary times.
- POLS 5600 Introduction to Public Administration** 3-0-3  
 A focus on the study of public administration processes and underlying theories within American government structures. Emphasis is on the pragmatic aspects of current government leadership and public agency management.
- POLS 5610 Public Administration and Public Policy Formation** 3-0-3  
 An examination of the basic problems involved in the development of public policy by government actors and institutions, with emphasis on public decision making, organizational theory, and political and administrative influences on the policy making process.
- POLS 5620 Health Policy** 3-0-3  
 An examination of the emergence of national health care programs in the United States. The course focuses on the contending interests in the health policy arena and on related management issues.

- POLS 6120 Ethics and Public Policy** 3-0-3  
**May also be taken as PHIL 6120.** A study of ethical issues involved in public policy with special emphasis on issues such as affirmative action, abortion, euthanasia, capital punishment, free speech, and privacy.
- POLS 6300 European Politics** 3-0-3  
 A study of the politics and government of Europe. The course focuses on key political institutions and issues in major European countries, and the impact of integration on the nation-state.
- POLS 6330 African Politics** 3-0-3  
 A study of the domestic and international politics of Africa from the pre-colonial period to the present day.
- POLS 6340 Comparative Political Leadership** 3-0-3  
 An application of theories of political leadership in a comparative framework. There will be considerations of conditions leading to effective as well as to failed leadership. Course material will include case studies of individual leaders as well as of key leadership bodies.
- POLS 6350 Politics in Developing Nations** 3-0-3  
 The study of political institutions, processes and behavior within a comparative perspective.
- POLS 6360 Politics of Post-Communism** 3-0-3  
 An examination of the political dynamics of Eurasia. Comparisons of emergent political systems in East Central Europe, Russia, and the newly independent nations formed out of the old Soviet Union will constitute the central focus. A secondary emphasis will be study of the regional and international orientations of these nation-states.
- POLS 6400 International Organization and Law** 3-0-3  
 Readings, cases, lectures and research on the functioning of the legal structures in the international system with special emphasis on the relation between law and politics.
- POLS 6410 American Foreign Policy** 3-0-3  
 A study of the domestic and external pressures that guide American foreign policy planners. Specific policies toward Russia, West Europe, China, and Latin America will receive special attention.
- POLS 6420 Global Security Policy** 3-0-3  
 The study of the political efforts to deal with threats to world order arising from war, nuclear proliferation, international terrorism, the environment, the economy, and related factors.
- POLS 6430 National Security Administration and Policy** 3-0-3  
 An examination of the organizational dynamics, political features, and policy outcomes of the national security decision-making process. Special attention will be placed on the changing role of the National Security Council.
- POLS 6600 Government Organization and Administrative Theory** 3-0-3  
 A systematic analysis of theories of organization, management, and administration. Special consideration will be given to institutional, behavioral, and psychological factors.
- POLS 6610 Public Personnel Administration** 3-0-3  
 An examination of procedures and problems of governmental personnel administration. Studies of governmental agencies are encouraged to give students first-hand knowledge of governmental personnel administration.
- POLS 6620 Public Finance Administration** 3-0-3  
 A study of the activities involved in the collection, custody, and expenditure of public revenue, such as the assessment and collection of taxes, public borrowing and debt administration, the preparation and enactment of the budget, financial accountability and the audit.

<b>POLS 6630 Techniques and Processes of Public Management</b>	3-0-3
An exploration of public management within the structure and context of a democratic government. The course examines the strengths and weaknesses of public management processes such as the National Performance Review, traditional public management techniques, and applied theories to assess change in Georgia laws. It also addresses public management leadership, decision-making, analytical models, budgeting, and selected public issues.	
<b>POLS 6640 Urban Politics and Administration</b>	3-0-3
An analysis of the governmental function in urban areas. Emphasis is placed on the management role in a political context.	
<b>POLS 6650 Intergovernmental Relations</b>	3-0-3
A study of federal, state, and local governmental interactions, with an emphasis on the implications of these interactions for public management.	
<b>POLS 6670 Quality Management in Public Administration</b>	3-0-3
An examination of the key current issues in public administration. The course explores the most current literature illuminating the issues facing public administrators in today's demanding environment.	
<b>POLS 6820 Special Topics in U. S. Government and Politics</b>	3-0-3
<b>POLS 6830 Special Topics in Comparative Politics</b>	3-0-3
<b>POLS 6840 Special Topics in International Politics</b>	3-0-3
<b>POLS 6850 Special Topics in Political Theory</b>	3-0-3
<b>POLS 6860 Special Topics in Public Administration</b>	3-0-3

#### PSYC: PSYCHOLOGY

<b>PSYC 5400 Abnormal Psychology</b>	3-0-3
<b>Open to graduate students from any major.</b> The nature and etiology of the various forms of behavior disorder, mental deficiency, and other deviations. Critical evaluation of current theories.	
<b>PSYC 5500 Statistical Methods in Psychology</b>	3-0-3
<b>Open to graduate students from any major.</b> Univariate and bivariate statistical methods for research in the behavioral sciences.	
<b>PSYC 5700 Rehabilitation Psychology</b>	3-0-3
The course focuses on biological, personality, cognitive, and social effects of disabilities on adult development. Emphasis is placed on sensory and motor disabilities and the roles played by vocational rehabilitation programs, independent living initiatives, and the community integration movement on rehabilitation. Implications of theory, research, and program implementation on rehabilitation outcomes are made.	
<b>PSYC 5800 Industrial/Organizational Psychology</b>	3-0-3
<b>Open to graduate students from any major.</b> Theory and application of psychological principles to industrial and organizational settings.	
<b>PSYC 6100 Physiological Psychology</b>	3-0-3
An introduction to neuroscience and physiological correlates of behavior is provided. Emphasis is on central nervous system structure and function as related to behavioral and psychological processes.	
<b>PSYC 6500 Special Topics</b>	1-0-1 to 3-0-3
<b>Prerequisite: Approval of advisor and instructor.</b>	

- PSYC 7000 Methods In School Psychology** 2-1-2  
**Prerequisite: Admission to Graduate Program in the Department.** The course is designed to introduce the student to the modern role functions of school psychologists. Historical, current, and future status of psychological services in the schools will be explored. Professional, legal, and ethical issues will be presented for discussion.
- PSYC 7010 Learning and Assessment** 3-0-3  
**Prerequisite: RSCH 7100.** This course assists the in-service educator (teacher, administrator, coach, curriculum supervisor, etc.) to understand learning and assessment as they apply in educational settings.
- PSYC 7020 Conditions Of Learning** 3-0-3  
**Prerequisite: RSCH 7100 or PSYC 5500.** This course is designed to aid the in-service educator in predicting, understanding, and controlling the fundamental principles of learning and human development as they apply to schools. The emphasis is on studying the variables shown by research to affect students and educators in the teaching/learning process.
- PSYC 7030 Measurement And Evaluation** 3-0-3  
**Prerequisite: RSCH 7100, PSYC 3500 or PSYC 5500.** An overview of issues related to assessment, measurement, and evaluation in educational and school counseling settings, including supervised experience in instrument selection, use, and outcomes analysis.
- PSYC 7040 Adult Learning and Assessment** 3-0-3  
**Prerequisite: RSCH 7100.** Course designed to aid the in-service educator in predicting, understanding, and controlling fundamental principles of learning and assessment as they apply in the education and training of adults.
- PSYC 7100 Intellectual Assessment** 3-2-4  
**Prerequisite: Admission to Clinical/Counseling Psychology or School Psychology.** A combination of lectures and supervised practical experiences on conducting psychological evaluations. Primary emphasis on the administration, scoring and interpretation of traditional and process oriented intellectual measures. Additional training on clinical interview and report writing skills as well as functional mastering of selected psychometric instruments.
- PSYC 7110 Personality Assessment** 3-2-4  
**Prerequisite: Admission to Clinical/Counseling Psychology or School Psychology.** An introduction to the theory, administration, and interpretation of personality assessment instruments, with primary emphasis on objective measures. Open only to advanced students with adequate background in psychological measurement and theory of personality.
- PSYC 7120 Academic and Behavioral Assessment** 4-1-4  
**Prerequisites: A previous graduate assessment course and permission of instructor. Also offered as SCHC 7120.** Advanced intensive study of the administration and interpretation of individual academic and behavioral assessment instruments with attention to multimethod, multisource, and multisetting methodologies; emphasis on the measurement of change within individuals and system levels of intervention.
- PSYC 7130 Infant and Preschool Assessment** 3-0-3  
**Prerequisite: Graduate standing, permission of the instructor, and prior coursework in measurement, evaluation, and child development.** Training on the administration, scoring, and interpretation of instruments assessing cognitive, visual-motor ability, and adaptive behavior of infants, toddlers, and preschool-aged children.
- PSYC 7200 Psychopathology** 3-0-3  
**Prerequisite: Admission to Clinical/Counseling Psychology or School Psychology or permission of the Instructor.** Overview of formal psychopathology classification systems across the life span with emphasis on the integration of multivariate, empirical approaches, and medical and psychological models. The course is designed to familiarize students with evolving information such as criteria, co-morbidity rates, and issues of differential diagnosis accrued from the current Diagnostic and Statistical Manual, and the developmental psychopathology literature. Case studies will be used to illustrate diagnostic issues.

- PSYC 7300 Human Development: Conception to Eight Years** 3-0-3  
**Prerequisite: Open to graduate students from any major.** The scientific study of age-related changes of children from conception to eight years of age with the development of sensory and perceptual systems, language, and cognition, temperamental styles and personalities, and social processes of primary interests. Implications of biological, psychological, and social risk factors for developmental outcomes in these domains will be reviewed. Up to 20 hours of direct observations of children required.
- PSYC 7400 Counseling Theory And Practice** 3-0-3  
**Also offered as SCHC 7400. Prerequisite: Admission to Graduate Program in Department.** Introduction to major theoretical approaches to counseling and psychotherapy. Theories of personality and the causes of mental illness and emotional distress will be reviewed as frameworks for intervention. Specific case examples will illustrate applications of theory to professional practice.
- PSYC 7420 Child Counseling** 3-0-3  
**Also offered as SCHC 7420. Prerequisite: PSYC 7200 or PSYC 7400.** Theories, methods, and techniques of psychotherapy with children. Emphasis will be placed on a multidimensional view of intervention with children, giving attention to developmental, cognitive, behavioral, affective, organic, educational, social, and environmental issues.
- PSYC 7450 Group Counseling** 3-0-3  
**Also offered as SCHC 7450. Prerequisite: PSYC 7400.** Group dynamics and their importance in the counseling process and counseling outcome are studied. Emphasis is given to the application of various counseling and psychotherapeutic approaches within the group setting.
- PSYC 7470 Counseling Culturally Diverse Populations** 3-0-3  
**Also offered as SCHC 7470. Prerequisite: PSYC 7400.** Survey of the cultural context of relationships, issues, and trends in a multicultural and diverse society. Emphasis placed on a knowledge base related to theory, techniques and skills utilized in working with culturally diverse populations.
- PSYC 7600 Personnel Selection** 3-0-3  
**Prerequisite: Permission of Instructor.** This course addresses personnel selection from predictors to criterion measures of job performance; measurement issues; job and task analyses; and the legal and social context for the process.
- PSYC 7610 Performance Appraisal** 3-0-3  
**Prerequisite: Permission of Instructor.** Methods, theory, and applications in the measurement of work performance as related to administrative, developmental, and feedback functions.
- PSYC 7670 Social Psychology** 3-0-3  
**Prerequisite: Open to graduate students from any major.** Integration of classic and contemporary theories, research, and application relating groups, organizations, culture, and society to individual behavior.
- PSYC 7690 Professional Issues In I/O Psychology** 1-0-1  
**Prerequisite: Permission of Instructor.** Current issues in the provision of I/O services.
- PSYC 7791, 7792, 7793, 7794, 7795 School Psychology Practicum** 1 hour each  
**Prerequisite: Admission to School Psychology program.**



- PSYC 7820 Career Counseling** 3-1-3  
**Also offered as SCHC 7820.** An introduction to the theories of career choice and to human development processes which influence career choice. Emphasis is placed on the nature and use of educational and occupational information in assisting individuals to explore the world of work and develop meaningful career plans. The course includes lab experiences consisting of administering scoring and interpreting career inventories. Students also learn about computer assisted career development including the Georgia Career Information System. Open as an elective to all graduate majors.
- PSYC 7860 The College Student** 3-0-3  
This course studies the development of the individual postsecondary education student. The major philosophies of student and individual development will be examined, in light of current adult development theories. The emphasis of the course will be on the specialized and developmental needs of the postsecondary education student.
- PSYC 7900 Pre-Practicum** 3-0-3  
**Also offered as SCHC 7900. Prerequisite: PSYC 7400** Advanced course in counseling and psychotherapeutic approaches emphasizing skill development. Extensive role playing in dyads and groups will be critiqued. Basic attending, empathy, and relationship skills will be emphasized as well as specific techniques such as desensitization, contracting, and role reversal.
- PSYC 7961, PSYC 7962 I/O Psychology Practicum I, II** 3 hours each  
**Prerequisite: Admission to I/O Program and Advanced standing.** Supervised training in an appropriate applied setting.
- PSYC 7971, PSYC 7972 Clinical/Counseling Psychology Practicum I, II** 2-0-2 each  
**Prerequisite: PSYC 7900 and successful completion of comprehensive examinations.**
- PSYC 8000 Research Design And Analysis** 3-0-3  
**Prerequisite: PSYC 5500 or permission of instructor.** Design of experimental and correlational research, using univariate, bivariate, and multivariate techniques.
- PSYC 8020 Advanced Educational Psychology** 3-0-3  
**Prerequisite: PSYC 7010 or PSYC 7020 and admission to College of Education Educational Specialist or Doctoral Program or approval of instructor.** The course applies the research and theory in educational psychology to practical problems in P-16 school settings. Students will be taught problem-solving processes and learn to apply them through discussion and resolution of a variety of case studies. Students will also develop a specific application to a current significant educational problem.
- PSYC 8030 Humanistic Psychology** 3-0-3  
**Prerequisite: Open as an elective to all graduate students.** Critical review of humanistic approaches in psychology. Students will learn how human motivation, adjustment and achievement are influenced by positive human relationships, which are characterized by free choice, spontaneity and creativity.
- PSYC 8050 Theories Of Personality** 3-0-3  
**Prerequisite: Open to graduate students from any major.** Review of theoretical approaches to personality with special emphasis on applications and critical evaluation. Specific issues in personality theory formulation and evaluation will also be discussed.
- PSYC 8100 Child And Adolescent Personality Assessment** 3-0-3  
**Prerequisite: PSYC 7110.** This course is an advanced, intensive study of the administration and interpretation of personality assessment instruments, with primary emphasis on multimethod, multisource, and multisetting assessment of children and adolescents.

- PSYC 8120 Alternative Assessment** 2-1-2  
**Prerequisite: PSYC 7100.** Alternative methodologies such as portfolio, authentic, curriculum-based, and dynamic assessment will be introduced. Integration of alternative and traditional methodologies will be emphasized. Application to multicultural, non-traditional settings, and to the assessment of special populations such as infants will be addressed.
- PSYC 8130 Computer Based Assessment** 2-1-2  
**Prerequisite: PSYC 7100.** Course content will include technological advances that augment both traditional as well as more recent assessment devices. Development and applications of alternative assessment methodologies such as adaptive testing and intervention-based program development will be examined.
- PSYCH 8140 Emergent Technologies for Intervention-Based Assessment** 1-0-1  
**Prerequisite: A previous graduate assessment course and/or permission of instructor.** Includes technological advances that augment both traditional as well as more recent assessment devices; examines alternative assessment methodologies for individual and family intervention-based program development.
- PSYC 8150 Behavioral Health Care Systems** 3-1-3  
**Prerequisite: PSYC 7420 or permission of instructor. Also offered as SCHC 8150.** Develops knowledge and skills concerning the behavioral health care of school aged youth with severe emotional disorders, including the conceptual, philosophical, operational, structural and procedural mechanisms commonly associated with system-level service coordination and delivery.
- PSYC 8200 Child Psychopathology** 3-0-3  
**Prerequisite: PSYC 7200.** An intensive study of formal psychopathology classification systems of infants, children, and adolescents with emphasis on multivariate or empirical approaches, medical models, and an integration of both. The course is designed to familiarize students with evolving information such as criteria, co-morbidity rates, and differential issues accrued from the current Diagnostic and Statistical Manual, developmental psychopathology literature, and research related to public laws governing special education. Case studies will be used to illustrate diagnostic issues.
- PSYC 8250 Developmental Psychology** 3-0-3  
**Prerequisite: RSCH 7100 or PSYC 8000, and Advanced standing.** The course is designed to acquaint the student with life span developmental problems, milestones, achievements, and social influences from a psychological perspective. Topics will include, but not be limited to, theory, research methods, biosocial influences, cognition, language, motivation, personality, and socialization processes.
- PSYC 8350 Psychology Of Motivation** 3-0-3  
**Prerequisite: Advanced standing.** Behavioral, cognitive, and physiological bases of motivation in theory and application.
- PSYC 8360 Human Resource Development** 3-0-3  
**Prerequisite: Advanced standing.** Development, administration, and evaluation of strategies and products utilized in the development of human resources in business, industrial, and educational settings.
- PSYC 8370 Human Factors Psychology** 3-0-3  
 Human learning, performance, and cognition in the context of human-machine and human-environment systems and interactions.
- PSYC 8400 Special Topics In Applied Psychology** 1-0-1 to 3-0-3  
**Prerequisite: Approval of Instructor.** Introduction to current advanced topics within the fields of applied psychology. Emphasis will be placed on specific content areas and applications.

- PSYC 8600 Theories Of Learning** 3-0-3  
**Prerequisite: Advanced standing.** A survey of the major historical (and contemporary) theories of learning and the theorists' positions on typical issues of learning, teaching, and counseling.
- PSYC 8610 Behavior Modification** 3-0-3  
**Prerequisite: Advanced standing, and approval of instructor.** The study of changes in human motivation, adjustment, and achievement as a function of the systematic application of principles derived from operant, respondent, and social learning theories. The student will be trained in defining, observing and recording behavior in various environments. Techniques of behavior therapy will be illustrated. Although there is an applied emphasis, a general knowledge of learning theory is recommended.
- PSYC 8800 Legal And Ethical Issues In Psychology** 3-0-3  
**Prerequisite: Admission to Graduate Program in Department and Advanced Standing.** Review of legal and ethical dilemmas and decisions faced in psychological practice, including research, assessment, teaching, therapeutic intervention, consultation, and court testimony. Emphasis will be placed on a review of professional guidelines and the process of ethical decision-making.
- PSYC 8891, PSYC 8892, PSYC 8893, PSYC 8894 School Psychology Internship I, II, III, & IV** 1 hour each  
**Prerequisite: Advanced standing in the Ed.S. Program in School Psychology.**
- PSYC 9050 Program Evaluation** 3-0-3  
**Prerequisite: PADM 9040. Also offered as PADM 9050.** Theories, research, and practice related to program evaluation in government and nonprofit organizations.
- PSYC 8999 Thesis** 3-0-3  
**Prerequisite: Admission to Graduate Program in Department, advanced standing, permission of advisor. Also offered as SCHC 8999.**
- PSYC 9710 Social Psychology in Educational Contexts** 3-0-3  
**Prerequisite: Approval of Doctoral Program Coordinator.** An intensive scientific study of how our thoughts, feelings, and behaviors are influenced by the actual, imagined, or implied presence of others. Various theoretical and applied approaches of social psychology will address the educational context.

#### READ:READING EDUCATION

- READ 6020 Reading in the Content Areas** 3-0-3  
 The simultaneous teaching of reading skills and course content. Emphasis is placed on preparing students for content area reading assignments, providing support during reading, and promoting higher level thinking. Motivating students to read widely and developing vocabulary, reading comprehension, and study skills will be dealt with in relation to the content areas.
- READ 6030 Directed Study in Reading** 3-0-3  
**Prerequisite: Consent of the Department Head.** An opportunity for intensive individual study in the student's field of specialization or an area of professional interest.
- READ 7010 Diagnosis and Correction of Reading Difficulties** 3-0-3  
 Study of the nature and causes of reading difficulties, procedures for diagnosis, and methods and materials for corrective techniques in the classroom.

- READ 7040 Emergent Literacy** 3-0-3  
Examines current and historical perspectives of language and literacy development and current trends and issues in language and literacy instruction. Emphasis will be placed on the practical application of the theoretical knowledge base to thoughtful decision-making for teaching and assessment of the language and literacy development of children in grades P-3.
- READ 7070 Balanced Reading** 3-0-3  
Implementation of balanced reading instruction in classrooms. A rationale will be presented for using a balanced approach to teach reading. The components of a balanced approach will be studied, and students will be required to implement these components in their classrooms.
- READ 7100 Trends and Issues in Reading** 2-0-2 to 3-0-3  
A review of current issues and trends in literacy education. Emphasis is on the principal viewpoints on these issues, including opposing points of view.
- READ 7110 Research and Theory in Reading** 3-0-3  
A review of the major research and theories in reading. Reading research findings will be applied to classroom instruction.
- READ 7120 Word Identification, Vocabulary, and Spelling Instruction** 3-0-3  
A review of research and instructional practices in word identification, vocabulary, and spelling. Research findings will be applied to classroom instruction.
- READ 7130 Comprehension and Study Strategy Instruction** 3-0-3  
A review of research related to comprehension and study strategies. Research findings will be applied to classroom instruction.
- READ 7140 Methods of Teaching Writing** 3-0-3  
Methods of instructing students to write in the narrative, poetic, expository, and persuasive modes. Emphasis is placed on appropriate strategies of using the writing process; addressing the issues of form, function, and audience; employing writing as a tool to integrate curriculum; using technology appropriately to enhance writing; and assessing writing through multiple approaches.
- READ 7150 Issues in Using Literature in the Classroom** 3-0-3  
An in-depth study of issues in using classic and contemporary literature in P-12 and adult literacy settings. Emphasis will be on using trade books to foster literacy development.
- READ 7160 Practicum in Diagnosing Reading Difficulties** 2-2-3  
**Corequisite: READ 7170.** Students will study the nature and causes of reading difficulties, develop and conduct diagnostic assessments, interpret the results of the assessments, and plan instructional programs to address the learning needs of children. Students will diagnose the reading difficulties of children in the reading lab.
- READ 7170 Practicum in Correcting Reading Difficulties** 2-2-3  
**Corequisite: READ 7160.** Students will apply their knowledge of the reading process to correct reading difficulties. They will develop and implement instructional programs to address the learning needs of children in the reading lab.
- READ 7180 Organizing and Supervising School Reading Programs** 3-0-3  
Principles of organizing and supervising school reading programs will be reviewed. Special emphasis will be given to identifying characteristics of programs that maximize student achievement across diverse populations.

## RSCH: RESEARCH

- RSCH 7100 Research Methodology in Education** 3-0-3  
This course provides a study of methods used to conduct educational and educationally-related research and includes critical analysis of selected research articles and research design. Emphasized is the ability to use research and research methods to improve practices in educational and educationally-related settings.
- RSCH 8000 Advanced Research Methodology** 3-0-3  
**Prerequisite: RSCH 7100 or permission of the instructor.** This course provides a study of quantitative and qualitative methods used to conduct educational and educationally related research, with a focus on the application of appropriate research models to the critique of published research and the preparation of research reports. Emphasized is the ability to use research and research methods in the development and completion of a research project in educational and educationally related settings.
- RSCH 8730 Mixed Methodologies** 3-0-3  
**Prerequisite: RSCH 8000.** This course provides an in-depth examination of quantitative and qualitative research methodologies and statistical analyses pertinent to educational and educationally related settings. A focus is placed on the application of field research methods to educational and educationally related settings.
- RSCH 9800 Educational Survey, Needs Assessment, and Program Evaluation** 3-0-3  
**Prerequisite: RSCH 9820, RSCH 9840, RSCH 9860.** Provided is a simulation and field practice in developing and implementing evaluations of educational personnel and programs and educational surveys and needs assessments.
- RSCH 9820 Qualitative Research Methods in Education** 3-0-3  
Study and application of qualitative research methodology in educational settings.
- RSCH 9840 Quantitative Research Methods in Education** 3-0-3  
Study and application of quantitative research methodology in educational settings.
- RSCH 9860 Advanced Mixed Methodologies** 3-0-3  
**Prerequisite: RSCH 9820, RSCH 9840.** Examined will be the application of advanced qualitative and quantitative research methodologies in educational settings.
- RSCH 9870 Dissertation Topic Conceptualization** 3-0-3  
**Prerequisite: RSCH 9800, RSCH 9820, RSCH 9840, RSCH 9860.** Research seminar for the development of the doctoral dissertation topic.
- RSCH 9880 Meta-Analysis Techniques in Educational Research** 3-0-3  
**Prerequisite: RSCH 9820, RSCH 9840, RSCH 9860.** The theoretical and meta-analytical literature review techniques used in educational research are the focus of this course.
- RSCH 9999 Dissertation in Educational Leadership** 1 to 3 hours credit  
**Prerequisite: LEAD 9870.** Investigation and completion of a field-based project on an educational leadership or educational leadership-related issue. Development and defense of the dissertation proposal and the dissertation. Must be taken each fall and spring semester until the dissertation is completed. The number of hours taken per term must be approved by the dissertation chair. A minimum of 9 hours must be completed.

## SCHC: SCHOOL COUNSELING

- SCHC 6900 Issues And Trends In School Counseling** 1-0-1 to 3-0-3  
**Prerequisite: Approval of advisor and instructor.** A varied offering of contemporary topics related to School Counseling.
- SCHC 7010 Comprehensive Developmental School Counseling** 3-0-3  
Development of school counseling programs that establish the school counseling program as an integral component of the academic mission of the school, ensure equitable access to school counseling for all students, identify the knowledge and skills that all students should acquire as a result of P-12 school counseling programs, and ensure that the comprehensive school counseling program is delivered in a systematic fashion to all students.
- SCHS 7120 Academic and Behavioral Assessment** 4-1-4  
**Prerequisites: A previous graduate assessment course and permission of instructor.**  
**Also offered as PSYC 7120.** Advanced intensive study of the administration and interpretation of individual academic and behavioral assessment instruments with attention to multimethod, multisource, and multisetting methodologies; emphasis on the measurement of change within individuals and system levels of intervention.
- SCHC 7400 Counseling Theory And Practice** 3-0-3  
**Also offered as: PSYC 7400. Prerequisite: Admission to Graduate Program in Department.** Introduction to major theoretical approaches to counseling and psychotherapy. Theories of personality and the causes of mental illness and emotional distress will be reviewed as frameworks for intervention. Specific case examples will illustrate applications of theory to professional practice.
- SCHC 7420 Counseling Children and Adolescents** 3-0-3  
**Also offered as PSYC 7420. Prerequisite: SCHC 7400.** Theories, methods, and techniques of psychotherapy with children. Emphasis will be placed on a multidimensional view of intervention with children, giving attention to developmental, cognitive, behavioral, affective, organic, educational, social, and environmental issues.
- SCHC 7450 Group Counseling** 3-0-3  
**Also offered as PSYC 7450. Prerequisite: SCHC 7400.** Group dynamics and their importance in the counseling process and counseling outcome are studied. Emphasis is given to the application of various counseling and psychotherapeutic approaches within the group setting.
- SCHC 7470 Counseling Culturally Diverse Populations** 3-0-3  
**Also offered as PSYC 7470. Prerequisite SCHC 7400.** Survey of the cultural context of relationships, issues, and trends in a multicultural and diverse society. Emphasis placed on a knowledge base related to theory, techniques and skills utilized in working with culturally diverse populations.
- SCHC 7800 Orientation to Counseling as a Profession** 2-0-2  
Principles, purposes, historic events, issues and trends, societal-legal-ethical issues, and professional identity are studied. Role and function of counselors in diverse settings are identified.

Credit notations on the far right are often in the pattern 3-0-3. The first number is the number of lecture hours (or equivalent) each week; the second number is the number of laboratory hours (or equivalent) each week; the third number, **in bold**, is the number of semester hours credit.

- SCHC 7820 Career Counseling** 3-1-3  
**Also offered as PSYC 7820.** An introduction to the theories of career choice and to human development processes which influence career choice. Emphasis is placed on the nature and use of educational and occupational information in assisting individuals to explore the world of work and develop meaningful career plans. The course includes lab experiences consisting of administering scoring and interpreting career inventories. Students also learn about computer assisted career development including the Georgia Career Information System. Open as an elective to all graduate majors.
- SCHS 7830 Consultation and Advocacy in School Counseling** 3-0-3  
**Prerequisite 7010.** Emphasis is placed on skills and competencies in the areas of consultation and advocacy that allow the student to function effectively as a consultant in the school system and as an advocate for all students.
- SCHC 7870 Student Personnel Service in Higher Education** 3-0-3  
 Development and organization of student personnel services in institutions of higher learning. The emphasis of the course is upon the philosophy, methods and techniques used in their operation.
- SCHC 7900 Pre-Practicum** 3-0-3  
**Prerequisite: SCHC 7400** Advanced course in counseling and psychotherapeutic approaches emphasizing skill development. Extensive role playing in dyads and groups will be critiqued. Basic attending, empathy, and relationship skills will be emphasized as well as specific techniques such as desensitization, contracting, and role reversal.
- SCHC 7981 School Counseling Practicum I** 3-0-3  
**Prerequisite: PSYC 7900.**
- SCHC 7982 School Counseling Practicum II** 3-0-3  
**Prerequisite: PSYC 7900.**
- SCHC 7991 School Counseling Internship I** 3-0-3  
**Prerequisite: SCHC 7981 and Graduate Standing.**
- SCHC 7992 School Counseling Internship II** 3-0-3  
**Prerequisite: SCHC 7981 and Graduate Standing.**
- SCHC 7993 School Counseling Internship III** 3-0-3  
**Prerequisite: SCHC 7981 and Graduate Standing.**
- SCHC 8150 Behavioral Health Care Systems** 3-1-3  
**Prerequisite: PSYC 7420 or permission of instructor. Also offered as PSYC 8150.** Develops knowledge and skills concerning the behavioral health care of school aged youth with severe emotional disorders, including the conceptual, philosophical, operational, structural and procedural mechanisms commonly associated with system-level service coordination and delivery.
- SCHC 8400 Special Topics In Applied Psychology** 1-0-1 to 3-0-3  
**Prerequisite: Admission to Ed.S. School Counseling and Approval of Instructor.** Introduction to current advanced topics within the field of applied psychology. Emphasis will be placed on specific content areas and applications.
- SCHC 8891 School Counseling Practicum I** 3-0-3  
**Prerequisite: Admission to Ed.S. School Counseling Program.**
- SCHC 8892 School Counseling Practicum II** 3-0-3  
**Prerequisite: Admission to Ed.S. School Counseling Program.**
- SCHC 8999 Thesis** 3-0-3  
**Prerequisite: Admission to Graduate Program in Department, advanced standing, permission of advisor. Also offered as PSYC 8999.**

## SEEC: SPECIAL EDUCATION/EARLY CHILDHOOD EDUCATION

- SEEC 5050 Assistive Technology** 2-0-2  
A study of various applications of technology for young children with disabilities that support inclusive services. Topics to be addressed include assistive technology assessment of young children with disabilities, selection and use of a variety of forms of assistive technology, and methods of securing funding for assistive technology.
- SEEC 5120 Issues and Trends for Identification and Special Delivery to All Young Children** 3-0-3  
A study of critical issues and trends in inclusive early childhood education. Topics addressed include developmentally appropriate practices, assessment practices, service delivery, and program evaluation.
- SEEC 5170 Methods of Teaching All Preschool Children** 2-2-3  
A thorough study of the philosophical and practical base of effective, developmentally appropriate, inclusive programs for children ages birth to five. Topics include programmatic assessment, curricular and program development and implementation (incorporating IFSP/IEP development), family participation, and progress monitoring.

## SEED: SECONDARY EDUCATION

- SEED 7900 Special Topics in Secondary Education** 1-0-1 to 3-0-3  
In depth study of specific contemporary issues in secondary education. Course may be repeated under different topics.
- SEED 8900 Special Topics in Secondary Education.** 1-0-1 to 3-0-3  
Advanced study of contemporary issues in secondary education. Course may be repeated under different topics.
- SEED 8999 Thesis** 3-0-3  
**Prerequisite:** SEED 8980 and consent of Department. Graded “Satisfactory” or “Unsatisfactory.” The data collection, analysis, and reporting phase of the Education Specialist research project. May be repeated.

## SOCI: SOCIOLOGY

- SOCI 6000 Sociology of Mental Health** 3-0-3  
Introduces students to the history and causes of mental illness as well as the language of the Diagnostic and Statistical Manual. The relationship between mental illness and the major sociological variables, such as social class, race, gender, age, and marital status will be analyzed. Students will evaluate mental illness from the institutional and client points of view.
- SOCI 6200 Sociology of Organizations** 3-0-3  
**Prerequisites:** Admission to the program. A sociological analysis of complex organizations. Course foci include theories and concepts in such areas as bureaucracy, power, authority, and organizational culture.
- SOCI 6300 Seminar in Classical Sociological Theory** 3-0-3  
An intensive study of classical sociological theory. Will begin with the intellectual precursors to sociology and then analyze primary works of the major theorists as well as secondary sources.



- SOCI 6700 Family Sociology** 3-0-3  
**Also offered as MFTH 6700.** The social context of contemporary issues facing families. Includes family history, cross-cultural issues, and research and theory regarding changing gender roles, family violence and abuse, divorce, single parenting, work families, sexual orientation, non-traditional families, and other relevant issues.
- SOCI 7011 Sociology in Applied Settings** 3-0-3  
**Prerequisite: Admission to the program or permission of the instructor.** Exploration of the use of sociology on both the micro and macro levels. Special emphasis is placed on the use of sociological theory and methods to work with clients, organizations, and communities as well as the ethical concerns raised by working with people.
- SOCI 7012 Sociological Theory** 3-0-3  
**Prerequisite: Successful completion of an undergraduate sociological theory course or permission of the instructor.** An analysis of contemporary sociological theory. The emphasis is on the relationship between theory and research, micro, meso, and macro linkages as well as the application of theory to understanding social problems and social policy.
- SOCI 7021 Statistical Applications in Sociology** 2-2-3  
**Prerequisite: Successful completion of an undergraduate statistics course or permission of the instructor.** Evaluation of social statistics and data management for applied research problems. Students will use computers to build data files, explore archival datasets, and prepare written analyses of research problems. Students will gain skills in determining which statistics to use for particular research problems and designs, which statistics provide the most practical means for reading and interpreting data, and what computer software is available to facilitate data analysis in sociology.
- SOCI 7022 Research Methods** 2-2-3  
**Prerequisite: Successful completion of an undergraduate statistics course and the successful completion of an undergraduate social science research course.** Survey of qualitative and quantitative methodologies in the discipline of sociology. Students will develop skills by hands-on data analysis when appropriate.
- SOCI 7050 Class, Gender, and Ethnic Issues in Applied Settings** 3-0-3  
 An in-depth study of the sensitivities needed by sociology students and other social science practitioners to the issues of social class, gender, and ethnicity. A multicultural perspective is to be developed by each student.
- SOCI 7100 Issues in Applied Sociology** 3-0-3  
 Intense study of issues which occur in applied settings, such as power, authority, leadership, social stratification, etc. May be repeated no more than times for credit.
- SOCI 7500 Development in the Family System** 3-0-3  
**Also offered as MFTH 7500.** Application of the developmental approach to the study of the family and the individual, with an emphasis on the family life cycle. Each of the states of family development from courtship to the death of the last mate will be examined.
- SOCI 7800 Sociological Practice** 3-0-3  
**Prerequisite: Successful completion of comprehensive examination for the M.S. degree in Sociology. Graded "Satisfactory" or "Unsatisfactory." Taken twice for credit. Field placement site must be approved by the course instructor.** Students will integrate sociological knowledge and practical experience during their placement in a field setting. Major integrative paper is required.
- SOCI 8010 Sociology of Education** 3-0-3  
 A study of education as a social institution with an emphasis on an analysis of theory and research relating social factors to academic performance and attitudes.

- SOCI 9010 Sociological Analysis of Education** 3-0-3  
 A sociological analysis of education as a social institution and as setting for social interaction, to include such topics such as social stratification, gender, ethnicity, race, social organization, social change, cultural diversity, group dynamics, religion, and leadership. Case studies will be used to emphasize the relationship between sociological theory and educational practices.
- SOCI 9070 Culture of Formal Work Organizations** 3-0-3  
**Also offered as PADM 9070.** The study of organizational culture and methods of changing culture in public and nonprofit organizations. The impact of culture on organizational behavior will be discussed.

### **SOWK: SOCIAL WORK**

- SOWK 6000 Orientation to Advanced Generalist Practice** 2-0-2  
**Prerequisite: Admission to the program with advanced standing status.** An overview of social work principles and skills. This is a transition course to orient students who already have a B.S.W. degree to the graduate degree perspective. This course is for advanced standing students only.
- SOWK 6004 Social Work Practice with Groups** 2-0-2  
**Prerequisite: Admission to the program.** Introduction to knowledge, skills, and values that underlie contemporary social work practice with various types of groups and group dynamics.
- SOWK 6100 Introduction to Professional Social Work Education** 1-0-1  
**Prerequisite: Admission to the program.** Orientation to graduate social work education.
- SOWK 6201 Human Behavior in the Social Environment I** 3-0-3  
**Prerequisite: Admission to the program.** Presents a multi-theory perspective on human behavior of individuals and families across the life span within the context of the social environment.
- SOWK 6202 Human Behavior in the Social Environment II** 3-0-3  
**Prerequisite SOWK 6201 and admission to the program.** Presents a multi-theory perspective on human behavior of groups, organizations and communities within the context of the social environment.
- SOWK 6301 Generalist Practice I Individuals and Families** 3-0-3  
**Prerequisite: Admission to the program. Corequisite SOWK 6303.** An introduction to knowledge of the problem-solving approach used in generalist practice with individuals and families within the ecological systems framework.
- SOWK 6302 Generalist Practice II Organizations and Communities** 3-0-3  
**Prerequisite SOWK 6301 and admission to the program.** The second course in the foundation practice sequence which presents knowledge of the problem-solving approach with work groups, organizations and communities within the Ecological Systems Framework.
- SOWK 6303 Practice Skills Lab** 0-2-1  
**Prerequisite: Admission to the program. Corequisite: SOWK 6301.** Laboratory for practice of social work interviewing skills.
- SOWK 6400 Social Welfare Policy, Problems, and Services** 3-0-3  
**Prerequisite: Admission to the program.** History of the social work profession and current patterns of the provision of social services. Policy formulation process, policy analysis and change.

- SOWK 6500 Research and Evaluation Methods in Social Work** 3-0-3  
**Prerequisite: Admission to the program.** Principles, methodologies, technologies and statistical approaches of human service research are introduced. Beginning capabilities in evaluation of social work practice and skill development regarding use of published research are emphasized.
- SOWK 6600 Practicum I** 0-6-3  
**Prerequisite: Admission to the program. Corequisite: SOWK 6610.** First semester of supervised practice for the integration of classroom learning in field settings.
- SOWK 6610 Practicum Seminar I** 0-1-1  
**Prerequisite: Admission to the program. Corequisite: SOWK 6600.** Seminar in which students discuss their practicum experiences with the goal of integrating social work theory and practice.
- SOWK 6700 Practicum II** 0-6-3  
**Prerequisites: SOWK 6600, SOWK 6610, and admission to the program. Corequisite: SOWK 6710.** Second semester of supervised practice for the integration of classroom learning in field settings.
- SOWK 6710 Practicum Seminar II** 0-1-1  
**Prerequisites: SOWK 6600, SOWK 6610, and admission to the program. Corequisite: SOWK 6700.** Second semester of seminar in which students discuss their practicum experiences with the goal of integrating social work theory and practice.
- SOWK 7000 Independent Study in Social Work** 3-0-3  
**Prerequisite: Must have permission of Division Head.** Independent study in social work.
- SOWK 7300 Advanced Practice in Rural Areas I Individuals** 3-0-3  
**Prerequisite: Admission to the program. Corequisite: SOWK 7310.** Provides students with practice models compatible with the ecological systems perspectives and with skills for working with individuals in the rural community.
- SOWK 7310 Advanced Practice in Rural Areas II Families** 3-0-3  
**Prerequisite: Admission to the program. Corequisite: SOWK 7300.** Advanced seminar which provides theories compatible with the ecological systems perspective in relation to multi-level work with families at different levels of functioning and of diverse forms.
- SOWK 7320 Advanced Practice in Organizations and Communities** 3-0-3  
**Prerequisites: SOWK 7300 and SOWK 7310 and admission to the program.** Provides applications of service management and planning principles and skills essential for social work planners, administrators, supervisors, and program developers.
- SOWK 7400 Policy in Rural Areas** 3-0-3  
**Prerequisite: Admission to the program.** A continuation of SOWK 6400 that focuses on social welfare policies in rural areas and small communities.
- SOWK 7500 Advanced Research and Program Evaluation** 3-0-3  
**Prerequisite: Admission to the program.** Emphasizes the integration of research and advanced generalist social work through evaluation of practice and program evaluation. Advanced statistical concepts are applied to direct practice and five types of program evaluation.
- SOWK 7611 Advanced Social Work Practicum I** 0-8-4  
**Prerequisite: Admission to the program.** The first of two concentration practica designed to prepare students for advanced generalist social work practice in rural settings.
- SOWK 7612 Advanced Social Work Practicum II** 0-8-4  
**Prerequisites: SOWK 7611 and admission to the program.** The second of two concentration practica designed to prepare students for advanced generalist social work practice in rural settings.

- SOWK 7630 Professional Seminar** 2-0-2  
**Prerequisite: Admission to the program.** A seminar to facilitate and structure students' transition from graduate school to post-graduation social work practice.
- SOWK 7700 Gerontology** 3-0-3  
**Prerequisite: Concentration Status for SOWK students or permission of department head for other graduate students.** Study of aging from a bio-psycho-social perspective within the context of culture and values with an emphasis on healthy aging in rural communities.
- SOWK 7750 Social Work in Child and Family Settings** 2-0-2  
**Prerequisite: Concentration Status for SOWK students or permission of department head for other graduate students.** Policy and practice issues are examined in the context of multiple child and family settings. Issues include: abuse reporting, parental rights, delinquency, child custody, support, and divorce.
- SOWK 7800 Social Work Practice in Health Settings** 2-0-2  
**Prerequisite: Concentration Status for SOWK students or permission of department head for other graduate students.** Prepares students for advanced rural practice across a variety of traditional and emerging inpatient and outpatient health care delivery systems.
- SOWK 7810 Psychopathology and Assessment for Non-Medical Helpers** 3-0-3  
**Prerequisite: Concentration Status for SOWK students or permission of department head for other graduate students.** Includes information on theories within the bio-psycho-social paradigm or on causality of disorders/conditions and the use of the DSM-IV.
- SOWK 7820 Issues in Substance Abuse** 3-0-3  
**Prerequisite: Concentration Status for SOWK students or permission of department head for other graduate students.** Alcohol and substance abuse issues are examined from the perspective of their individual and cultural impact. Strategies for prevention and treatment are introduced with an emphasis on bio-psycho-social approaches.
- SOWK 7830 Social Work Practice in Mental Health** 2-0-2  
**Prerequisite: Concentration Status for SOWK students or permission of department head for other graduate students.** An advanced seminar on mental health service delivery—past, present and future— in rural environments.
- SOWK 7840 Seminar on Loss and Bereavement** 3-0-3  
**Prerequisite: Graduate status or permission of the director.** A seminar focused on a multidisciplinary perspective for helping clients deal with significant losses, using practical interventions at the individual and family level.
- SOWK 7850 Social Work Practice in Schools** 2-0-2  
**Prerequisite: Concentration Status for SOWK students or permission of department head for other graduate students.** Focuses on the issues and laws related to social work practice in the school. Issues related to rural schools are presented.
- SOWK 7860 Grant Writing in Human Services** 3-0-3  
**Prerequisite: Concentration Status for SOWK students or permission of department head for other graduate students.** Provides knowledge, skills, and process of grant writing with an emphasis on human services in rural communities.
- SOWK 7870 Social Work Practice with Abusing and Neglecting Families** 3-0-3  
**Prerequisite Concentration Status for SOWK students or permission of department head for other graduate students.** An advanced seminar in social work practice with abusing and neglecting families. Content includes current knowledge about causes, dynamics, and interventions related to neglect and abuse of children, elders, spouses and rape victims.

- SOWK 7880 Social Work Practice in Forensics** 3-0-3  
Forensic issues for social work practitioners, focusing on assessment skills, career opportunities, interviewing techniques, and preparation for court testimony.
- SOWK 7890 Spirituality in Social Work Practice** 3-0-3  
A framework of knowledge, values, skills, and experiences for spiritually sensitive social work practice and subsequent social justice ramifications.

### **SPAN: SPANISH**

- SPAN 6010 Advanced Grammar** 3-0-3  
Advanced study of the structure of the Spanish language, with emphasis on practical composition and refinement of written expression.
- SPAN 6020 Advanced Conversation** 3-0-3  
Intensive approach to spoken Spanish based on contemporary themes.
- SPAN 6110 Spanish Phonetics and Phonology** 3-0-3  
Study of the phonetics and phonemics of the Spanish sound system, including but not limited to phonological analysis and transcription. Emphasis is placed on the study of those sounds found in the dialects of what has been traditionally labelled American Spanish (Mexico, Central America, and the South American highlands); however, important dialectal variations, such as those found in Caribbean and peninsular Spanish, will also be presented.
- SPAN 6210 Survey of Contemporary Hispanic Theater** 3-0-3  
Critical consideration of the major canonical and non-canonical dramatic works in Spain and Latin America from the 1930's to the present. Readings include, from among others, the works of García Lorca, Arlt, Buero Vallejo, Usigli, Villarutia, Marqués, Gambaro, Berman, and Pedrero. Some study of the genre of theater and dramatic movements, such as Theater of the Absurd, will also be included.
- SPAN 6220 Hispanic Women Writers** 3-0-3  
Exploration of the way in which Hispanic women writers have created voices and identities through a variety of textual strategies. A study of the development of feminist discourse through these works will also be covered. Readings may include works from Sor Juana Inés de la Cruz, Isabel Allende, Julia de Burgos, Luisa Valenzuela, Angeles Maestretta, Rosario Castellanos, Mercé Rodoreda, Ester Tusquets, Santa Teresa de Avila, Ana María Matute, Carmen Martín Gaité, and Rosa Montero.
- SPAN 6250 Twentieth-Century Spanish Literature** 3-0-3  
Study of the genres, movements and writers most representative of the literature of Spain during the twentieth century. The course begins with the writers of the Generation of '98, continues with selected works in fiction, drama, and poetry of the years prior to and immediately following the Civil War, and concludes with examples of the literature of Spain in the last decades of the twentieth-century.
- SPAN 6260 Latin American Prose: Twentieth-Century Novel** 3-0-3  
Study of selected Latin American novels which reflect the major trends in the development of the genre during the twentieth century.
- SPAN 6270 Latin American Prose: Twentieth-Century Short Story** 3-0-3  
Study of selected Latin American short stories which reflect the major trends in the development of the genre during the twentieth century.
- SPAN 6300 Hispanic Caribbean Literature** 3-0-3  
Study of the identity of the Hispanic Caribbean, drawing from literary texts of Puerto Rico, the Dominican Republic, and Cuba, in order to develop a greater understanding of the history, economics, sociology, culture, and literature of the region.

- SPAN 6400 Chicano and U.S. Latino Writers** 3-0-3  
 Study of selected works written by Chicano and U.S. Latino authors that are representative of the bicultural/bilingual culture for which they speak. Emphasis is placed on literary and cultural studies with some study and application of literary criticism.
- SPAN 6900 Special Topics** 3-0-3  
 Special topics in Spanish language or Hispanic literature, civilization, or culture. May be repeated up to a maximum of 6 hours if topics are different.
- SPAN 6950 Directed Study** 1-0-1 to 3-0-3  
 Study in area or topic of Spanish language or Hispanic literature, civilization, or culture not normally found in established courses offered by the department. Students may also study more extensively an area or topic covered by the departmental curriculum. May be repeated up to a maximum of 3 hours if topics are different.
- SPAN 6970 Study Abroad Practicum** 1-0-1  
 Orientation to the study abroad experience. Pre-departure sessions will focus on preparing the student to achieve the maximum learning potential from his/her stay in the selected site. Assigned readings and videos and regular discussion with the supervising instructor will familiarize the student with significant cultural practices that may differ from those of U.S. society and with geographical and historical features of the region as well as prepare him/her to function in the daily life of the community. A series of activities will be designed for the student to complete during the study abroad stay, and upon his/her return, the student will make at least six presentations related to the study abroad experience to university Spanish classes, elementary, middle or high school classes, or community organizations. The course is a requirement for all Spanish graduate students who participate in a study abroad program. Credit for the course is in addition to other credit earned through the study abroad program.
- SPAN 7011 Don Quijote, Part I** 3-0-3  
 Study of the first volume, published in 1605, of Miguel de Cervantes' *Don Quijote*.
- SPAN 7012 Don Quijote, Part II** 3-0-3  
 Study of the second volume, published in 1615, of Miguel de Cervantes' *Don Quijote*.
- SPAN 7050 Generation of 1898** 3-0-3  
 Study of representative works of authors of the Generation of '98, including Miguel de Unamuno, Antonio Machado, Ramón María del Valle-Inclán, Pío Baroja, and Azorín.
- SPAN 7100 Poetry and Theater of Federico García Lorca** 3-0-3  
 Study of the major works of Federico García Lorca.
- SPAN 7200 Novels of Gabriel García Márquez** 3-0-3  
 Study of the major novels of Gabriel García Márquez, their precursors, and their influence on the development of the Latin American narrative.
- SPAN 7300 Short Stories and Poetry of Jorge Luis Borges** 3-0-3  
 Study of representative works from the short stories and poetry of Jorge Luis Borges.

Credit notations on the far right are in the pattern 3-0-3. The first number is the number of lecture hours (or equivalent) each week; the second number is the number of laboratory hours (or equivalent) each week; the third number, **in bold**, is the number of semester hours credit.

## SPEC: SPECIALEDUCATION

- SPEC 5000 Individualized/Independent Study** 1-0-1 to 3-0-3  
Study directed by faculty designed to meet identified, individual needs of students.
- SPEC 5010 Student Teaching: Mild Disabilities or Mental Retardation or Early Childhood Special Education or Deaf/Hard-of-Hearing** 0-20-5  
**Prerequisite: Consent of the departmental Student Teaching Committee. Corequisite: SPEC 5020.** University-supervised placement in public school programs for students K-12 with mild disabilities or mental retardation or in Early Childhood Special Education programs. The student teacher will assess students, plan and write instructional interventions, deliver instruction, monitor and document student progress, and assume all other classroom duties of the mentoring teacher(s). A minimum of 20 contact hours per week is required in the school for the entire semester. May be taken multiple times. Ten credit hours are required in one of the above areas for certification/licensure recommendation. **NOTE:** A student who receives a grade of Unsatisfactory (U) for student teaching may apply for student teaching only one additional time. The student will be required to complete a prescribed program of remediation before being permitted to student teach the second time. Any student who receives a second grade of "U" for student teaching will be permanently dismissed from all teacher education programs in the College of Education and will not be recommended for teacher certifications by Valdosta State University.
- SPEC 5020 Student Teaching Seminar: Mild Disabilities or Mental Retardation or Early Childhood Special Education or Deaf/Hard-of-Hearing** 1-0-1  
**Prerequisite: Consent of the departmental Student Teaching Committee. Corequisite: SPEC 5010.** A forum for discussion and exchange of ideas relating to the responsibilities of professional ethical practices. Topics include direct intervention issues, advocacy, collaboration, diversity, and any others that arise during student teaching. May be taken multiple times. Two hours are required in one of the areas for certification/licensure recommendation.
- SPEC 5030 Single Subject Research in Special Education (Responsive Teaching)** 3-0-3  
Application of single subject research methodology in classroom settings with students who have disabilities. Focus is on acquisition of skills necessary to allow a functional relationship to be established between teaching practices and changes in pupil behavior.
- SPEC 5040 Applied Research Project** 1-0-1 to 2-0-2  
**Corequisite: SPEC 5010.** Planning and implementation of procedures to conduct and write an applied research study based on a need identified in the student teaching classroom setting.
- SPEC 5050 Integrating Technology in Classrooms for Students with Disabilities** 3-0-3  
An application of computer and associated hardware and software as they relate to individualized education programs of students with disabilities. Course content includes the use of assistive technology to facilitate student acquisition, fluency, maintenance, and generalization of skills.
- SPEC 5090 Community-based Instruction** 2-0-2  
A study of the theoretical and practical interventions used to effectively teach students who require extensive and/or pervasive supports to acquire and perform chronologically age-appropriate and functional skills and behaviors in community environments.
- SPEC 5100 Nonaversive Behavior Management** 3-0-3  
A study of the principles and application of positive behavioral support strategies for managing challenging behaviors of individuals with disabilities. This approach focuses on understanding functional assessments, developing and implementing individualized nonaversive behavior support plans.

- SPEC 5120 Issues and Trends in Special Education** 2 -0-2  
**Corequisite: SPEC 5040.** A study of the current issues and trends in the field of special education related to instruction, advocacy, policy, service delivery, and training. Students will investigate an area of interest based on empirical literature.
- SPEC 5140 Collaborative Roles in Education** 3-0-3  
 A critical analysis of issues, research, implementation approaches, and recommended practices for employing collaborative models to support learning. Evaluating and accessing community resources, and developing and maintaining interdisciplinary and interagency partnerships will be studied.
- SPEC 5150 Introduction to Early Childhood Special Education** 2-2-3  
 A study of the history and rationale for services to infants, toddlers, and preschool children at risk for or with developmental disabilities and their families. The student will be introduced to typical and atypical child development, service delivery options and key components of family guided community based practices.
- SPEC 5160 Serving the Young Child with Low Incidence Disabilities** 3-0-3  
**Prerequisite: SPEC 5150.** An overview of young children with low incidence disabilities (e.g. deaf-blindness, severe multiple disabilities), their unique service delivery needs, behavioral and instructional supports, and coordination of services. Trends and recommended practices will be discussed.
- SPEC 5170 Linking Assessment to Service Delivery** 3-2-4  
**Prerequisites: SPEC 5150, COMD 5060.** A thorough study of the philosophical and practical base of effective assessment and intervention for young children with disabilities. Topics include eligibility evaluation, programmatic assessment, IFSP/IEP development, intervention planning and implementation in various service delivery settings, family participation, and progress monitoring.
- SPEC 5190 Physical and Health Management of Students with Disabilities** 3-0-3  
 A study of physical and health management procedures necessary for individuals with disabilities. Course content addresses knowledge of roles and responsibilities of the educational team in meeting the physical and health needs of individuals with disabilities. Emphasis is placed on developing an understanding of the role of the teacher in meeting the needs of children with physical and health management needs as well as working with other professionals (e.g., nurses, physical therapists) in assuring that those needs are met.
- SPEC 5200 Practicum in Mental Retardation** 3-0-3  
**Prerequisites: Completion of all prerequisite undergraduate coursework, and grades of "B" or better in SPEC 5030, 5100, and 5120.** A university-supervised teaching experience for graduate students who wish to complete a graduate degree or area certification.
- SPEC 5210 Practicum in Mild Disabilities** 3-0-3  
**Prerequisites: Completion of all prerequisite undergraduate coursework, and grades of "B" or better in SPEC 5120, 5140, 7610, and 7630.** A university-supervised teaching experience for graduate students who wish to complete a graduate degree or area certification.
- SPEC 5220 Practicum in Early Childhood/Special Education** 3-0-3  
 A university-supervised teaching experience for graduate students who wish to complete a graduate degree or area certification.
- SPEC 5230 Field Experience Lab** 0-2-1  
 Field experience for application of instructional methods for students with disabilities. Students will apply concepts from the methods courses to assess, select, and use of a variety of evidence based instructional methods.
- SPEC 5260 Characteristics of Students with Physical and Health Disabilities** 3-0-3  
 A study of physical, learning and behavioral characteristics of students with a variety of physical disabilities. Course content addresses knowledge of the etiology, treatment, prognosis, course, and educational implications of neuromotor impairments, degenerative diseases, orthopedic and musculoskeletal disorders, and health impairments.



- SPEC 5270 Strategies for Teaching Individuals with Physical and Health Disabilities** 3-0-3  
 A study of methods for teaching people with physical and other health impairments, including assessment, instruction, organization and curriculum design, communication intervention, literacy, assistive technology, and collaboration with parents, paraprofessionals, and other professionals.
- SPEC 5280 Practicum in Physical Disabilities** 3-0-3  
**Prerequisite: Grades of “B” or better in SPEC 5190, SPEC 5260, and SPEC 5270.** A university-supervised teaching experience for graduate students who wish to complete a graduate degree or area certification.
- SPEC 5290 Audiological Considerations for Teachers** 4-0-4  
 Introductory course in audiology for teachers. Topics to be covered include types of hearing loss, audiogram interpretation, causes of hearing loss, and treatment of hearing loss.
- SPEC 5310 Methods of Teaching Reading and Writing to Deaf Students** 3-0-3  
 Principles and techniques used in the development of reading and writing skills in deaf and hard of hearing children. Focus on reading theory, applications, diagnostic procedures, and instructional methods for teaching students experiencing hearing loss.
- SPEC 5350 Characteristics of Students with Severe Learning Disabilities** 3-0-3  
 An in-depth study of the etiology, characteristics, and diagnostics for students with severe learning disabilities and their effects on developing educational programs and treatment services.
- SPEC 5360 Teaching Students with Severe Learning Disabilities** 3-0-3  
 A study of classroom organization and a variety of research-validated teaching methods and materials for instruction and transitioning of students with severe learning disabilities. These methods and materials reflect the need for more intrusive and intensive approaches to provide an appropriate individualized education for students with severe learning disabilities. The course will provide students with knowledge and skills in differentiating between research-supported and popularly advocated interventions.
- SPEC 5370 Teaching Thinking Skills** 3-0-3  
 Designed to prepare teachers to become familiar with cognitive strategies that promote higher level thought in deaf learners. Emphasis is placed on how to incorporate these strategies into regular classroom instruction.
- SPEC 5380 Curriculum Development Instruction for Deaf Students** 4-0-4  
 Curriculum planning and special adaptations in teaching school subjects to deaf and hard of hearing students at the elementary, intermediate and secondary levels. Selection, development, modification, evaluation, and use of instructional media.
- SPEC 5450 Characteristics of students with Severe Behavior Disorders** 3-0-3  
 An in-depth study of the etiology, characteristics, and diagnostics for students with severe behavior disorders and their effects on developing educational programs and treatment services.
- SPEC 5460 Teaching Students with Severe Behavior Disorders** 3-0-3  
 A study of classroom organization and a variety of research-validated teaching methods and materials for instruction and transitioning of students with severe behavior disorders. These methods and materials reflect the need for more intrusive and intensive approaches in order to provide an appropriate individualized education for students with severe behavior disorders. The course will provide students with knowledge and skills in differentiating between research-supported and popularly advocated interventions.
- SPEC 5500 Characteristics of Students with Low Incidence Disabilities** 3-0-3  
 A study of current and future historical, philosophical, social, legal, medical, and educational perspectives of students with low incidence disabilities. The identification, classification, and unique characteristics of these individuals are included.

- SPEC 5510 Curriculum Design for Students with Low Incidence Disabilities** 3-0-3  
Curriculum approaches and strategies to design, implement, and monitor functional and age-appropriate programs for children and youth with low incidence disabilities in both school and community-based settings.
- SPEC 5520 Assessment of Students with Low Incidence Disabilities** 3 hours credit  
Coursework and field experience in assessment techniques for students with low incidence disabilities. Required activities include exposure to and experience with informal assessment procedures across curriculum areas to generate IEP objectives, measurement strategies, and methods for monitoring progress. The course requires 40 contact hours.
- SPEC 5530 Systematic Instruction for Students with Low Incidence Disabilities** 3-0-3  
Strategies and methods to facilitate the acquisition, generalization, and maintenance of skills for children and youth with low incidence disabilities in both school and community-based settings. This course will focus on evidence-based methods of systematic instruction.
- SPEC 5540 Positive Behavior Support** 3-0-3  
Study of the principles and application of positive behavioral support strategies for managing challenging behaviors of individuals with low incidence disabilities. Course content focuses on the development of behavioral support strategies derived from functional assessments.
- SPEC 5550 Communication Strategies for Students with Low Incidence Disabilities** 3-0-3  
Strategies and methods to facilitate acquisition, generalization, and maintenance of functional language and communication skills for children and youth with severe disabilities in both school and community-based settings. Course content includes methods for identifying and implementing augmentative and alternative communication systems.
- SPEC 5610 Nature and Needs of Children Who Are Talented and Gifted** 3-0-3  
A course designed to give an overview of educational and behavioral characteristics of pupils who are talented and gifted. Includes diagnosis, referral, management, and educational practices.
- SPEC 6000 Integration and Management of Instruction in the Classroom** 3-0-3  
Identification and implementation of management and instructional strategies that have demonstrated effectiveness. Through applied projects focused on K-12 student learning, students will demonstrate the ability to evaluate intervention efficacy.
- SPEC 6010 Integrated Instruction: Individualized Education Program** 3-0-3  
The theoretical and practical basis of curriculum design for individuals with disabilities throughout the life cycle. Individualized Education Plan development and program planning that incorporates student access to the general education curriculum are components of this course.
- SPEC 6020 Integrated Instruction: Assessment and Learning** 3-0-3  
Formal assessment, processes, and classroom assessments techniques unique to evaluating the developmental level and potential achievement of children with exceptionalities. Emphasis is on the use of the 4se tools in planning and selecting curricular programs and activities.
- SPEC 6030 Integrated Instruction: Evidence-based Methods and Strategies** 3-0-3  
Research-based instructional strategies for enhancing the ability of students with mild disabilities to acquire, retain, and demonstrate academic and social competence across academic and social content areas as addressed in the general school curriculum.
- SPEC 6040 Technological Support Planning for Children and Youth with Disabilities** 3-0-3  
An introduction to computers and related hardware and software as they related to the individualized education program and needs of individuals who require intermittent or limited support. The course emphasizes classroom applications and technology in support of the needs of students with disabilities.

- SPEC 6100 Reading and Applying Research in Special Education** 3-0-3  
Study and application of fundamental characteristics of quality research across a number of methodologies in special education. Emphasis is placed on students' development of an evidence-based research proposal to be implemented in the capstone course (SPEC 6110) that has the potential to impact programs or practices that affect students.
- SPEC 6110 Professional Capstone Course** 3-0-3  
Culminating course. Students will implement a project that demonstrates their ability to apply evidence-based research to impact programs or practices that affect K-12 student learning.
- SPEC 6600 Methods & Materials for Children Who Are Talented and Gifted** 3-0-3  
A course covering the development of curriculum content and teaching materials for students identified as talented and gifted. Considerable time will be spent on organizing learning experiences and utilizing a variety of teaching methods.
- SPEC 6620 Curriculum for Children Who Are Talented and Gifted** 3-0-3  
This course provides a study of curriculum models, the types of curriculum needed for the Talented and Gifted, guidelines for developing curricular patterns which include subject or skill, core, interest, process, experiential bases of operations, and modular designs of community involvement. The course requirements include the development of curriculum of learning activities which will have greatest applicability and usability within the local school system.
- SPEC 7600 Assessment of Children Who Are Talented and Gifted** 3-0-3  
Introduction to tests unique to assessing the developmental level and the potential achievement of children with talents and gifts. Emphasis is placed on the use of these tests in planning and selecting curricular programs and activities.
- SPEC 7610 Assessment of Children** 3-0-3  
A course introducing tests unique to assessing the developmental level and the potential achievement of children with exceptionalities. Emphasis is placed on the use of these tests in planning and selecting curricular programs and activities.
- SPEC 7630 Integration of Management and Instruction in the Classroom** 3-0-3  
Students will learn to identify and implement management and instructional strategies which have demonstrated effectiveness. The ability to self-evaluate intervention efficacy will be demonstrated by students.
- SPEC 8010 Readings in Issues of the Education of Children and Youth with Disabilities** 3-0-3  
An in-depth study of research articles which present factual information regarding the chief issues in programs for children and youth with disabilities.
- SPEC 8020 Characteristics of Effective School Structures for Children and Youth with Disabilities** 3-0-3  
An application of the effective schools' literature to programs for children and youth with disabilities in school settings.
- SPEC 8030 Administration of Special Education Programs** 3-0-3  
A review of and in-depth study of legal issues which govern programs for children and youth with disabilities.
- SPEC 8040 Developing Professional Training Programs in Special Education** 3-0-3  
The study of and development of professional training programs in the field of special education.
- SPEC 8050 Advanced Applications of Technology for Special Education Programs and Research** 3-0-3  
The application of computer technology for training other professionals and academic instruction of students with disabilities as well as conducting and disseminating research in special education.

- SPEC 8060 Single Subject Designs for Special Education Research** 3-0-3  
An in-depth review of the use of single subject designs for research which has been conducted in special education. Application of these designs to research questions in school settings will be discussed.
- SPEC 8110 Advanced Capstone Experience** 3 hours credit  
Culminating course; a variety of research-validated practices to demonstrate advanced teachers' ability to positively impact K-12 learning.
- SPEC 8999 Thesis** 3 hours credit  
Development and defense of the thesis. Must be taken each semester until the thesis is completed. Number of hours taken per semester must be approved by the Thesis Chair. A minimum of 6 hours must be taken to complete the course of study for this program.

### **WMBA: WEB-BASED MASTER OF BUSINESS ADMINISTRATION**

- WMBA 6000: Human Behavior in Organizations** 3 hours credit  
An examination of the behavioral and structural factors affecting the performance of organizations including both micro and macro organizational issues. This course provides an overview of the field of organizational behavior with an emphasis on employing the human resources of the firm to achieve organizational performance. Topics include motivation, leadership, job satisfaction, selection, training, and the dynamics of teams.
- WMBA 6010: Managerial Accounting** 3 hours credit  
This course will cover a wide range of topics that will emphasize the use of both internal and external data to enhance the decision-making skills of managers. Concepts covered will include an overview of the management accounting function within the organization, cost management and cost accumulation systems, planning and control systems, use of historical data in forecasting costs, and the use of accounting information in management decision-making. Case readings will be used to enhance students' critical thinking, problem solving, and communication skills. In many instances, the emphasis in this course is on the processes that lead to a decision rather than on the decision itself. Students will be challenged to defend their rationale for decisions rather than simply presenting the "correct" answer. In addition, students will be frequently required to work with unstructured information sets and to make reasonable assumptions in order to make decisions.
- WMBA 6020: Managerial Communications** 3 hours credit  
Designed to meet the needs of the practicing manager. Included are the internal and external communications carried out by managers in organizations and the organizational and human variables, which influence these communications. Included is the management of information systems. Communication styles of managers from different cultures are discussed.
- WMBA 6030: Global and International Business** 3 hours credit  
This course is designed to provide the student with an understanding of how companies enter and operate in the global market. Additionally, students will learn how culture, politics, legal and economic systems impact the marketing and trading of products in other countries. Students will develop an understanding of the business strategies and structures in the global arena, and will learn how managers interact and manage diverse groups.
- WMBA 6040: Managerial Decision Analysis** 3 hours credit  
A study of advanced quantitative analysis techniques and their applications in business. Topics include game theory, decision analysis, forecasting, linear programming, transportation and assignment problems, network models, project management, queuing theory and Markov analysis.

**WMBA 6050: Strategic Marketing** **3 hours credit**

This course provides a study of the strategic managerial aspects of marketing given the growth of E-Commerce. Topics focus on product, price, promotion, and place in the ethical planning, implementing, and controlling of marketing operations.

**WMBA 6060: Managerial Finance** **3 hours credit**

A study of financial risk and return, capital budgeting, valuation, capital structure, working capital management and current topics in financial management. This course is designed to develop a student's knowledge, analytical skills and communication skills in the area of financial management. The student will be exposed to the reasons financial management is critical to the success of a business as well as the tools that will enhance their managerial skills. Specifically, this course will give the student tools to analyze a company's financial position relative to the industry, apply time value of money concepts to business cash flows, evaluate the acceptability of a short-term and long-term financial decision, understand the relationship between capital structure, risk, and the cost of capital, and improve communication skills.

**WMBA 6080: Management of Information Systems** **3 hours credit**

A study of the effects of information technology on firms, industries, and the organization of work. Includes the development of strategies for corporate growth based on effective use and management of information technology, the analysis of business problems and relevant information systems solutions, and the use of IT to transform business processes and provide more effective management control and decision systems.

**WMBA 6100: Production and Operations Management** **3 hours credit**

This on-line course is an introduction to the concepts, principles, problems, and practices of operations management. Emphasis is on managerial processes for achieving effective operations in both goods-producing and service-rendering organizations. Topics include operations strategy, process design, capacity planning, facilities location and design, forecasting, production scheduling, inventory control, quality assurance, and project management. The topics are integrated using a systems model of the operations of an organization.

**WMBA 6110: Business Strategy** **3 hours credit**

An integrative course designed to provide an executive viewpoint of strategy formation and management of an enterprise. The course teaches how to analyze complex business situations in order to determine a firm's strategies for long-run survival and growth in competitive markets. Participants will examine techniques for analysis of environmental conditions and trends, opportunities and threats, and resource strengths and limitations. Focus will be on developing plans and implementing and controlling those plans at both the strategic and operating level. Primary teaching method will use real-time case studies that cover policy formulation and administration. A strategy simulation will also be used. The point of departure for the course is top and middle management, where company-wide objectives are set and departmental policies and activities coordinated.

Most credit notations on the far right are in the pattern 3-0-3. The first number is the number of lecture hours (or equivalent) each week; the second number is the number of laboratory hours (or equivalent) each week; the third number, **in bold**, is the number of semester hours credit.