

# Psychology (PSYC)

**110 General Psychology (3)** Introduction to the methods and findings in psychology with emphasis on the origins, research methods and goals of psychological science, biological foundations of behavior, sensation and perception, learning, memory and information processing, cognition, language, cognitive development, and social and personality development.

**120 General Psychology (3)** Introduction to the methods and findings in psychology with emphasis on motivation and emotion, personality theories, psychological testing, psychopathology and therapy, attitudes and social perception, social relations, group influence, and altered states of consciousness.

**110H-120H Honors General Psychology (3, 3)** Limited class size, extensive discussion, writing assignments, and research projects are featured. Open to students who have demonstrated superior academic ability. *Prereq: Departmental approval.*

**300 Introduction to Clinical Psychology (3)** A survey of the science and practice of clinical psychology. Topics include a review of the historical roots of clinical psychology, issues of diagnosis and treatment of disorders, theoretical models of clinical assessment and intervention, professional and ethical issues. *Prereq: PSYC 110-120.*

**310 Human Relations and Personal Adjustment (3)** A study covering principles and practices of human relations skills in organizations and of personal adjustment in everyday life. Motivation and leadership, communication skills and transactional analysis, assertiveness, stress management, and self-concept development.

**311 Human Relations for Staff (3)** A course covering principles and practices of human relations skills in organizations. Content of course aimed at administrators and staff in university settings. Motivation and leadership, communication skills and transactional analysis, assertiveness, stress management, and self-concept development. Pass-Fail credit.

**312 Social Psychology (3)** A study of social influences on human behavior. Attitudes, conformity, prosocial and antisocial behavior, prejudice, interpersonal perception and attraction, leadership,

persuasion, and group dynamics. Lectures and readings are supplemented by measurement of social behavior in class projects. Writing requirements include essay examination questions and research papers. *Prereq: Three hours general psychology or general sociology. (Same as SOC 312)*

**313 Developmental Psychology (3)** A theoretical and empirical study of human cognitive, social, and personality development. Primary emphasis on psychological growth and change in infancy, childhood, and adolescence. Lectures and readings are supplemented by individual projects involving observation and measurement of behavior in natural settings. Writing requirements include essay examination questions and research papers. *Prereq: PSYC 110.*

**315 Experimental Psychology I (4)** An introduction to research methodology and statistics in the behavioral sciences. Topics will include a scientific overview, ethics, hypotheses, basic statistics, experimental design, and SPSS. Students will complete several research papers in the publication format of the American Psychological Association. Essay examinations are given and speaking assignments are required. Three one-hour lectures and one one-hour lab. *Prereq: PSYC 110-120.*

**318 Experimental Psychology II (4)** A continuation of Experimental Psychology I in research methodology and statistics in the behavioral sciences. Topics will include calculating probability, correlation, SPSS, t-tests, and ANOVA. Students will complete a comprehensive research project and several research assignments in the publication format of the American Psychological Association. Three one-hour lectures and one one-hour lab. *Prereq: PSYC 110-120 and 315 with a grade of C or better, and MATH 140 or equivalent.*

**320 Learning and Cognition (4)** A survey and critical analysis of theoretical issues, empirical findings, and research methods in the psychology of learning and cognition. Coverage includes mechanisms of learning and how learned information is retained, processed, and used in memory and other cognitive processes. Students conduct several laboratory research projects and write up the results in the publication format of the American Psychological Association. Three one-hour Lectures and one one-hour lab. *Prereq: PSYC 315 and 318.*

**330 Applied Behavior Analysis** (4) An in-depth view of the history, principles, procedures, and clinical applications of techniques based on learning theory. The student will be expected to design, conduct, and write up several behavioral-intervention projects involving children or adults. Three one-hour lectures and one one-hour practicum. *Prereq: PSYC 315 and 318.*

**340 Industrial and Organizational Psychology** (3) Psychology of employee selection, training, proficiency, evaluation, motivation, morale, and reactions to working conditions. Speaking assignments are required. *Prereq: PSYC 110-120.*

**350 Abnormal Psychology** (3) A study of the biological and psychological factors underlying abnormal behavior. The dynamics of psychological models, patterns of abnormal behavior and non-technical discussion of diagnostic and therapeutic methods. *Prereq: PSYC 110-120.*

**355 Abnormal Child Psychology** (3) A study of the biological and psychological factors underlying abnormal behavior in children. Includes a clinical description (non-technical discussion of etiology, assessment, prognosis, and treatment), theories, methods, and research dealing with emotional, cognitive, and behavioral disorders of children. *Prereq: PSYC 110-120.*

**360 Drugs and Behavior** (3) Effects of recreational and therapeutic drugs on the brain and behavior. Coverage includes depressants (alcohol, barbiturates), stimulants (caffeine, nicotine, amphetamines, cocaine), narcotics (morphine, heroin, methadone), hallucinogens (LSD, PCP, marijuana), antipsychotics, and antidepressants. A major component of the course includes understanding addiction and how it is treated.

**365 Special Topics in Psychology** (3) Selected topics in the area of psychology. The course subject matter will vary by semester; for example, psychology and law, health psychology, human sexuality, psychology and the media, neuropsychology, neuropsychological disorders in children, addictions counseling, psychology of aging, etc. Course may be repeated with total credits not to exceed six (6) hours.

**370 Psychology of Women** (3) This course concerns psychological approaches to studying women. It examines relevant theory and research. Topics include identity and self-concept, relationships and power, sexuality, parenting, work, mental health and women of color. (Same as WMST 370)

**445 Undergraduate Research Participation** (3) Experience in active research projects involving supervision of staff members. By arrangement. *Prereq: Junior or senior standing, minimum average of 3.00, instructor's approval.*

**450 Theories of Personality** (3) A critical review of historical and contemporary personality theories. Psychoanalytic, constitutional, actualization, and field-theoretical and learning-theory views. *Prereq: PSYC 120 and PSYC 350 or instructor's approval.*

**470 Physiological Psychology** (4) A systematic study of the nervous system and other physiological correlates of behavior. Three one-hour lectures and one one-hour lab. *Prereq: PSYC 315 and 318.*

**475 History of Psychology** (3) A comprehensive survey of the historical antecedents of modern psychology with emphasis on both scientific and philosophical origins. Essay examinations are given. Students write a comprehensive research paper. *Prereq: Six hours upper-division psychology.*

**480 Senior Seminar** (3) A detailed review of methods, content, and issues in psychology. Active student participation, including oral presentation of papers. This course must be taken in the final semester. The areas covered on the final exam are: Abnormal, Animal Learning/Motivation, Developmental, Experimental Design, History and Systems, Human Learning/Cognition, Personality, Physiological, Social, and Statistics. For psychology majors only.

**490 Field Work in Psychology** (1-3) Supervised field work placements available for students who want to explore career options in clinical or industrial psychology. *Prereq: Junior or senior standing and instructor's approval. Course may be repeated with total credits not to exceed six (6) hours.*

**701 Directed Studies in Psychology** (3) Directed study into the different subject matter areas of psychology.

## Reading (READ)

**100 The Strategic Dimension of Reading** (3) A course designed to assist students in using strategies and skills to become life-long readers. Provides intensive practice in the strategic reading of a variety of college-level texts. Focus in this course is on reading strategies, critical thinking, experiences that foster an appreciation of reading and print information, and encourage life-long reading.

**111 Effective Reading** (2) A small group experience designed for students interested in vocabulary improvement and comprehension in a variety of reading situations.

**433 (633) Reading in the Content Area Classroom** (3) A study of methods and materials that can be used in content area classrooms to improve vocabulary skills and comprehension and enhance content retention. Students will develop materials for us in their specific areas of content concentration. *Prereq: Junior standing and a 2.5 cumulative GPA.*

**438 (638) Classroom Approaches to the Teaching of Reading in the Elementary School** (3) A study of various approaches and techniques in the teaching of reading for children including informal identification, analysis, and remediation of specific reading difficulties.

**700 Foundations of Reading** (3) An examination of various approaches and techniques in developmental reading. Emphasis will be on advanced methodology and its theoretical basis.

**710 Advanced Reading Diagnosis and Corrective Reading** (3) Study of advanced diagnostic procedures for children who exhibit severe reading difficulties, followed by instruction in techniques for planning and implementing improvement in identifying problem reading behavior. *Prereq: READ 700 or equivalent.*

**720 Research Based Techniques for Teaching Reading and Language Arts** (3) A study of research findings in teaching composition, English grammar, handwriting, listening, literature, spelling, and application of new research to effective teaching of reading. *Prereq: READ 700 or instructor's approval.*

**730 Reading as a Psycholinguistic Process** (3) The investigation of current developments in cognitive psychology, and linguistics as they relate to understanding the reading act. Reading theories and models will be compared and evaluated. *Prereq: READ 700.*

**740 Practicum in Reading** (3) A field-based experience in a school setting with children who have reading problems, focusing on observation, diagnosis, planning, and implementing programs designed to bring about improvement in reading behaviors. *Prereq: READ 710.*

## Religious Studies (RLST)

**201 Religion and Contemporary Culture** (3) Contemporary science and literature considered in their impact upon the relevance for religion in the 20th century. A study of such concepts as human nature, alienation, commitment, illusion, and hope.

**301 Major Religions of the World** (3) A survey of the history and philosophy of major living religions: Hinduism, Jainism, Buddhism, Confucianism, Taoism, Zoroastrianism, Judaism, Christianity, and Islam. (Same as PHIL 301)

**306 Religion and Society** (3) Interrelationships of society, culture, and religion. *Prereq: SOC 201. (Same as ANTH 306 and SOC 306)*

**320 Traces of God** (3) An analysis of the contemporary question of the existence and nature of God and the relevance to that question of experience, faith, revelation, mysticism, proofs, history, relationships, and creativity. Also an exploration of the relation of God and the World in terms of creation/evolution, time/eternity, and culture/values. Position paper required. (Same as PHIL 320)

**340 Death, Suffering, and Evil** (3) A study of the essential limits and boundary situations of life, particularly the dark shadows of death, suffering, and evil. Special attention given to an investigation of the possible meaningfulness of these limits and their value for authentic life. Other considerations include: suicide, abortion, war, crime, punishment, illness, insanity, perversion, inequality, waste. Position paper required. (Same as PHIL 340)

**350 The Hebrew-Jewish Scriptures** (3) A study of the religious ideas, history, literature, and theology of the Hebrew-Jewish Scriptures. Some attention to principles of interpretation and critical issues.

**360 The Christian Scriptures** (3) A study of the religious ideas, history, literature, and theology of the New Testament. Some attention to principles of interpretation and critical issues.

**380 Topics in the Philosophy and History of Religion [Selected Topics]** (3) Intensive coverage of issues in the philosophy of religion (such as the theistic attributes, theistic proofs, religious language) or in the history of religion (such as non-Western religious traditions, eras of reform, the history of interpretation). Course may be repeated with total credits not to exceed six (6) hours. (Same as PHIL 380)

## Secondary Education (SEDU)

**411 Instructional Strategies: Science** (3) Trends in teaching secondary school science grades 7-12. Curriculum, strategies, laboratory and field experience, materials, computer assisted instruction, evaluation processes, professional associations, and safety in science teaching. Directed experiences in public schools. *Prereq: TCED 302 and admission to Teacher Education.*

**412 Instructional Strategies: Mathematics** (3) Development of strategies, techniques, materials, planning and evaluation skills in teaching mathematics. Directed experience in public schools. *Prereq: TCED 302 and admission to Teacher Education.*

**413 Instructional Strategies: Modern Foreign Language** (3) Purposes, techniques, materials, and evaluation in teaching Modern Foreign Language. Directed experiences in public schools. *Prereq: TCED 302 and admission to Teacher Education.*

**414 Instructional Strategies: English** (3) Purposes, techniques, materials, and evaluation in teaching English. Directed experiences in public schools. *Prereq: Admission to Teacher Education and TCED 302.*

**415 Instructional Strategies: Social Studies** (3) Purposes, techniques, materials, and evaluation in teaching Social Studies. Directed experiences in public schools. *Prereq: Admission to Teacher Education and TCED 302.*

**420 (620) Workshop in Education: [Title of Workshop]** (1-3) Workshop on selected topics. Same as ELED 490 (690) if same Title of Workshop. No more than six hours of workshop credit may be applied to an undergraduate or graduate degree in education. *Prereq: Instructor's approval.*

**421 (621) Computer Literacy for the Classroom Teacher** (3) Familiarization with the microcomputer as pertains to the public school. Familiarity with commonly used computer terminology, development of an awareness of different types of software, and ability to determine what constitutes good quality software. Study of word processing and emphasis as a tool for the teacher in the classroom. *Prereq: Admission to Teacher Education.*

**422 (622) The Microcomputer and Its Use in the Classroom** (3) Provision of the understanding and skills necessary to make the computer an effective tool in the classroom. Focus on the use of the computer in the various subject (grade level) areas. Attention to computer ethics. (Same as ELED 422/622)

**423 (623) Logo for the Public School Teacher** (3) Focus on the educational, philosophical, and psychological development of the Logo environment in a public school setting. Emphasis on the project approach. *Prereq: Admission to Teacher Education. (Same as ELED 423/623)*

**715 Principles and Practices of Secondary Education: Curriculum and Instruction** (3) Current trends, issues and practices in secondary education; strategies for improving curriculum and instruction; development of concepts and skills for curriculum and generic instruction planning.

**725 Advanced Education Seminar [Selected Topics]** (3) Course can be taken in multiples of 3 semester hours for a maximum of 9 semester hours. *Prereq: Permission of instructor. Certain sections may be offered on a pass/fail basis.*

**730 Problems in Teaching in a Secondary**

**School: [Subject Area]** (3) Current issues related to the teaching of the particular area. Topics may include, but not be limited to, individual and/or group investigation of problems involved with teaching in the discipline, the development of higher order reasoning skills, as well as discussion of recent curriculum trends and materials. Certain sections may be offered on a pass/fail basis.

**760 Supervision of Student Teaching and**

**Field Experiences** (3) A study of objectives and general techniques of supervising student teachers and students participating in field experiences in public schools.

**792 Master Research Project, 7-12** (2) The culminating professional research project for the Master of Science in Education with a major in Teaching Program. Seminar topics to include but not limited to educational reform, curriculum design, student achievement, parent involvement, cultural diversity, education technology, assessments, and educators as collaborative leaders and mentors (in a 7-12 setting). *Prereq: SEDU 791. May repeat enrollment. P/N only.*

**793 Student Teaching Grades 7-8** (5) Supervised student teaching in grades 7-8 for a minimum of 7.5 weeks. Must be taken with SEDU 794.

**794 Student Teaching Grades 9-12** (5) Supervised student teaching in grades 9-12 for a minimum of 7.5 weeks. Must be taken with SEDU 793.

**795 Student Teaching Grades 7-12** (5) Supervised student teaching in grades 7-12 for a minimum of 7.5 weeks. To be taken by candidates seeking licensure in K-12 programs.

## Social Work (SWRK)

**200 Introduction to Social Work and Social Welfare** (3) Introduces students to the profession of social work and provides an overview of the professional knowledge, skills, and values necessary for generalist social work practice. An overview of the historical, philosophical, educational, and social dimensions of the social work profession. The origins, structure, and characteristics of the Ameri-

can social welfare system. Survey of the needs and problems people bring to social welfare agencies and patterns of societal responses. Special emphasis on rural areas.

**220 Understanding Human Diversity and Oppressed Populations** (3) Focuses on the dynamics and consequences of discrimination, economic deprivation and oppression on people of color, women, gay and lesbian persons. Other populations at risk are examined and distinguished by age, ethnicity, culture, class, and physical or mental ability. Exploration of personal and professional beliefs, values, roles and norms of culturally different clients and the use of culture in formulating appropriate intervention. (Same as WMST 220)

**300 Social Welfare Policies and Services** (3) Focuses on the identification of and relationship between social problems and social welfare policy. Emphasis is on social policy analysis using principles of social and economic justice as well as on intervention strategies at the local, state and national levels. *Prereq: Approval for initial progression.*

**315 Social Work in Health Care** (3) Provides special emphasis on the elderly. The role of the social worker relative to the patient and his/her family and to medical personnel, medical terminology, and crisis intervention. *Prereq: Instructor's approval.*

**320 Human Behavior and Social Environment I** (3) Introduces a broad range of theories relating to human bio-psycho-social development through childhood. General systems theory used to provide a social work orientation to the understanding of human behavior in individuals, small groups, large groups, communities and formal organizations. Social and economic factors as well as sex/gender and race are considered as determinants of behavior. *Prereq: Approval for initial progression; ZOOL 201 or 251; PSYC 110 or 120.*

**325 Social Work in Child Welfare** (3) Focuses on child neglect and abuse, family treatment, foster care, adoptions and other family and children's services. *Prereq: Instructor's approval.*

**330 Human Behavior and Social Environment II** (3) Continues the presentation of a model which analyzes the life-cycle and organizational function-

ing focusing on the period from early adolescence through very old age, as well as the effects on systems of diversity, oppression, and populations-at-risk. Emphasis is placed on the interactional processes involved in the socialization of the individual as a member of the family unit, social groups, organizations, and communities. *Prereq: SWRK 320.*

**335 Social Work in Mental Health** (3) Focuses on mental retardation and mental health issues and appropriate interventions at the micro, mezzo, and macro levels. *Prereq: Instructor's approval.*

**340 Social Work Practice I** (3) Presents a generalist approach to the basic principles and concepts of social work practice. Building on foundation knowledge, values and skills introduced in SWRK 200, an ecological-systems approach to problem solving is emphasized. Introduction of the general methods of social work interaction on micro-systems is the primary emphasis. *Prereq: SWRK 320 and concurrent registration in SWRK 350.*

**345 Juvenile Justice: Social Problems and Legal Issues for Social Work and Criminal Justice** (3) Focuses on the juvenile, the family, and the community as related to and interwoven with legal issues, practices and processes encountered by the social work and criminal justice professionals and their clients. (Same as CJ 370)

**350 Social Work Practice Skills and Techniques** (3) Offers laboratory-like interaction which builds on the theoretical information presented in SWRK 340. Skills and processes of engagement, data collection, assessment, intervention, evaluation, and termination phases in service delivery with a variety of systems are included. This course focuses on interviewing and recording techniques which can be applied to all levels of social work practice. Role play and videotaped scenarios assist in development of skills. *Prereq: SWRK 320 and concurrent registration in SWRK 340.*

**375 Social Work in the School Setting** (3) Provides understanding of the social worker's role in the interface between pupils, parents, schools, and communities. Focus on primary prevention and intervention in the school setting. *Prereq: Instructor's approval.*

**400 Social Work Practice II** (3) Is the second of three courses providing the framework for generalist beginning social work practice and builds on the foundation provided in SWRK340. Emphasis on mezzo-systems including family system. Also, an overview of group work, including a historical perspective and related group models. Focus on group formation, including assessment, composition, working agreement and stages of group development. Nondiscriminatory practice reinforced. Student participation in field experience is required. *Prereq: SWRK 340 and approval for advanced progression.*

**410 Social Work Research and Evaluation** (3) Introduces students to quantitative and qualitative methods of research used in social work. Emphasis will be placed on developing the student's knowledge and ability to ethically use scientific inquiry as a tool for adding to the knowledge base of social work practice, evaluating one's own practice, and evaluating social service programs. *Prereq: MATH 210 and approval for initial progression.*

**415 Social Work in Child Welfare II** (3) This course is a preparatory course for certification as a child welfare worker. Specific knowledge, skills and values of the TN Department of Children's Services are presented. *Prereq: SWRK 325 and admission to the social work program.*

**425 Special Topics** (1-3) Selected topics of current interest and importance. *Prereq: Instructor's approval. Course may be repeated with different topics.*

**440 Social Work Practice III** (3) Is the third of three courses providing the generalist method as a practice framework for beginning social work practice. Integration of knowledge, values and skills in problem solving, interpersonal helping, and intervention approaches with individuals, groups and communities. Primary emphasis on macro-systems. Ethical implications of practice examined in depth. *Prereq: SWRK 340 and approval for advanced progression.*

**455 Social Work Travel Study [Selected Topics]** (1-3) A course designed as an educational travel experience in Social Work within the United States or internationally under the supervision of a university instructor. May be taught as an organized

study-tour or as an independent travel and study project. Topics, prerequisites, and course requirements announced in advance. May be offered on a pass/fail basis. Students may repeat course with different topics. Not regularly offered. Requires instructor's approval.

**460 Social Work Senior Seminar** (2) Integration of social work professional foundation areas as defined by the Council on Social Work Education in a written case study. This course must be taken the semester prior to SWRK 490.

**470 Social Work Field Instruction Preparation** (1) A lab course designed primarily to prepare students for field instruction, professional employment and/or continued training. This course must be taken the semester prior to SWRK 490.

**490 Social Work Field Instruction** (12) Provides block placement for direct practice experience in a selected social work setting. Students' activities are supervised jointly by a designated agency employee in the work setting and by the Social Work Program Coordinator of Field Instruction or other designated social work faculty. Individual work with student interns and their supervisors is provided by periodic visits during the semester by faculty. Additional learning and preparation through regularly scheduled seminars. *Prereq: Completion of all other courses required for graduation and approval for full progression.*

## Sociology (SOC)

**201 General Sociology** (3) Study of human society and the means by which groups and individuals adjust; the nature of social process, social structure, social organization (institutions), and social change.

**202 Social Problems** (3) Analysis of selected contemporary social problems in their social and cultural setting. Develop an awareness of local, national and international social problems. Learn and apply sociological perspectives to the analysis of social problems.

**208 Marriage and Family** (3) The relationships of the family structure to social organization. Particular emphasis focused on the family histori-

cally, mate selection, marital adjustment, marital happiness, and divorce in a changing society. (Same as WMST 208)

**300 Cultural Anthropology** (3) An examination of theory and method in cultural anthropology as used in the analysis of multicultures. Case studies from different ethnographic settings provide the primary source material. *Prereq: ANTH 101, SOC 201, or instructor's approval. (Same as ANTH 300)*

**301 Social Research Methods** (3) Major concepts and techniques in social science research, including the scientific method, measurement, sampling, and data collection techniques. *Prereq: SOC 201 and 202 with a grade of C or above.*

**302 Social Statistics** (3) Emphasizes proper use and interpretation of statistics in research and evaluation settings. Covers descriptive and inferential statistics, including central tendency, variability, analysis of variance, correlation, and regression. Intensive training in the use of statistical and spreadsheet programs for calculating statistics. *Prereq: Any MATH numbered above 100, SOC 301.*

**304 (504) Race, Class, and Power** (3) Description of stratification patterns, functions and dysfunctions of such patterns, conflicts generated by race and class, and possible ways of resolving problems associated with race/class differences. *Prereq: SOC 201. (Same as ANTH 304/504)*

**305 (505) Sociology of Deviant Behavior** (3) Theoretical analysis of the relation of deviant behavior to social and cultural standards of value, convention, and law. *Prereq: SOC 201.*

**306 (506) Religion and Society** (3) Interrelationships of society, culture, and religion. *Prereq: SOC 201. (Same as ANTH 306/506 and RLST 306)*

**312 Social Psychology** (3) A study of social influences on human behavior. Attitudes, conformity, prosocial and antisocial behavior, prejudice, interpersonal perception and attraction, leadership, persuasion, and group dynamics. Lectures and readings are supplemented by measurement of social behavior in class projects. Writing requirements include essay examination questions and research papers. *Prereq: Three hours general psychology or general sociology. (Same as PSY 312)*

**341 (541) Men and Women: Gender Roles in American Society** (3) An examination of how gender is socially produced, and the implications of gender for individuals, social processes, and social structure. *Prereq: SOC 201. (Same as ANTH 341/541 and WMST 341)*

**364 (564) Corrections** (3) Provides an overview of the history and various perspectives of incarceration, tracing the development of prisons in America from their earlier roots in Europe. An examination is placed upon prison inmates, correctional staff, correctional treatment and punishment philosophies, political perspectives regarding criminal offenders, and special interest offenders such as juveniles and females, as well as capital punishment. (Same as CJ 364/564)

**381 (581) Special Topics** (3) Selected topics of current interest in sociology and/or anthropology. Course may be repeated with different topics. Maximum of six hours of topics/courses can be counted toward the major or minor. (Same as ANTH 381/581)

**402 (602) Sociological Theory** (3) A survey and analysis of classical and contemporary sociological theory as it applies to both historic and current events. Topics may include inequality, genocide, and the role of ideas and class as social forces driving history and theory forward. *Prereq: SOC 201 and 202 with a grade of C or above.*

**404 Social Stratification** (3) An emphasis is made upon the class system of the United States with some comparisons to stratification systems of other times and societies. Theory and research appropriate to the analysis of structured social inequality are surveyed. *Prereq: SOC 201 or ANTH 101, and SOC 202 or 208. (Same as ANTH 404)*

**413 (613) Criminology** (3) Problems, theory, cause, control, and prevention of criminal behavior. *Prereq: SOC 201.*

**433 (633) Population Processes and Problems** (3) Demographic factors and social structure. Trends in fertility, mortality, and migration. Methods of demographic research. Population policy. *Prereq: SOC 201.*

**455 Sociology Travel Study [Selected Topics]** (1-3) A course designed as an educational travel experience in Sociology within the United States or internationally under the supervision of a university instructor. May be taught as an organized study-tour or as an independent travel and study project. Topics, prerequisites, and course requirements announced in advance. May be offered on a pass/fail basis. Students may repeat course with different topics. Not regularly offered. Requires instructor's approval.

**480 Internship in Sociology** (3-6) Application of sociological skills in a supervised workplace setting. Placement will be determined by the instructor, in consultation with the student. The student may or may not be paid. Student grades will be based on the instructor's academic evaluation as well as the work evaluation by the student's on-the-job supervisor. *Prereq: SOC 201, 202, Sociology major, senior standing, and a minimum 3.00 GPA in Sociology coursework or permission of department chair. May only be taken once for credit.*

**485 Directed Reading and Research** (3) A systematic sociological/anthropological study of a selected topic through supervised reading of pertinent substantive and methodological literature, primary data collection or use of secondary data and statistical analysis of data by a Sociology/ Anthropology faculty. Maximum of 6 hours of primary topic research or different topics can be counted toward major or minor. By arrangement only. *Prereq: ANTH 101 or SOC 201, an additional 3 credit hours sociology/ anthropology course, minimum cumulative GPA of 3.00, and instructor's approval of topic and research methods. (Same as ANTH 485)*

**495 (695) Comparative Family Systems** (3) An examination of families both cross-culturally and historically. Attention is directed to understanding the variation and similarities in family structures, marital arrangements, premarital relations, gender roles, and socialization. *Prereq: SOC 201. (Same as ANTH 495/695 and WMST 495)*

**497 (697) Senior Seminar** (3) Readings, discussion of problems, and presentation of papers. This course must be taken the semester prior to graduation. *Prereq: Sociology major or Anthropology minor. (Same as ANTH 497/697)*

## Soil Science (SOIL)

**210 Soil Science** (4) The nature and properties of soils. Provides an introduction to the characteristics of soils. Discussions of the biological, chemical, and physical processes which occur in soil and how these processes affect plant growth and environmental quality. Three one-hour lectures and one two-hour lab. *Prereq: CHEM 111 or 121 or consent of instructor.*

**250 Soil and Landscape Evaluation** (1) Principles of soil morphology as utilized in soil and landscape evaluation in the field. Involves describing, classifying and interpreting soils in preparation for regional and national soil judging contests. May be repeated. Maximum four hours. *Prereq: Consent of instructor.*

**301-302 Special Problems** (1, 1) Individual problems for students exhibiting special interests and abilities in soils, soil morphology and classification, soil fertility, management, and conservation. Maximum of one hour applicable to concentration requirements. Written project outline and report of results required. Taught only by arrangement prior to registration.

**315 Soil and Water Conservation** (3) Problems, principles, and control of soil erosion by water and wind; land planning for soil conservation: water management, including irrigation and drainage problems: philosophies of land ethics and stewardship. Students are required to write reports and give oral presentations. Three one-hour lectures. *Prereq: SOIL 210.*

**321 Soil Genesis, Morphology and Classification** (3) Study of the soil as a natural, three-dimension system: the effect of geologic, climactic, and biotic interactions on soil characteristics and processes of formation and methods of classifying soils. Two one-hour lectures and one three-hour lab. *Prereq: SOIL 210.*

**401-402 Research Participation** (3, 3) Research project involving supervised independent study for students exhibiting special interests and abilities in the soils area. Maximum of three hours applicable to concentration requirements. Presentation of written project outline and written and oral reports required. Taught only by arrangement prior to

registration. *Prereq: Senior standing, minimum GPA of 2.75.*

**412 (612) Soil Chemistry and Fertility** (3) The principles of soil chemistry as they relate to ion exchange, nutrient availability, and soil fertility. Sources, properties, and utilization of fertilizers and other soil amendments by plants. Three one-hour lectures. *Prereq: SOIL 210.*

**420 Soil Microbiology and Biochemistry** (3) Study of soil microorganisms including their habitats, activities and ecological relationships. Emphasis on microbial interactions and processes which affect both agricultural practices and environmental quality, including: nutrient cycling, decomposition of organic residues and compounds dynamics of soil organic matter: enzymatic activities: potential use of soil organisms for environmental remediation. Three one-hour lectures. *Prereq: SOIL 210 and MBIO 251 or 310, or consent of instructor.*

**421 Soil Microbiology and Biochemistry Laboratory** (1) Laboratory study of soil microbial populations, organic compound decomposition, nitrogen transformations, and enzyme activities in soils. One three-hour lab. *Prereq: Completion of, or concurrent enrollment in SOIL 420.*

**430 (630) Wetland Science** (3) An introduction to the conservation and management of wetland environments. Emphasis will be placed on the role of wetlands in maintaining water quality and strategies for multiple use management of wetland resources. Students will become familiar with basic and applied concepts in hydrology, soils, and vegetation of both constructed and natural wetlands. Three one-hour lectures and two Saturday field trips. *Prereq: CHEM 111 or 121, BIOL 120 or 140, MATH 140, or consent of instructor. It is the assumption of the instructor that a student has a basic understanding of biological chemistry, for example the processes of photosynthesis and respiration.*

**440 (640) Soil Physics** (3) An introduction to soil as a porous medium that supports the growth of plant roots by retaining air, heat, water and nutrients. These same physical processes govern the movement of chemicals in the environment. The course will cover physical processes and properties and develop the concepts of transport and retention.

## Spanish (SPAN)

### **111 Elementary Spanish (4)** (TBR: SPAN 1010)

An introductory course emphasizing listening, speaking, reading, and writing. May be used to remove an entrance deficiency or for students with no prior experience in this language. After passing 111, students will take the second semester of the elementary sequence, 122. Three one-hour lectures and two hours of lab.

**115 Transitional Spanish (4)** A review of listening, speaking, reading, and writing for students who have had two years of Spanish at the high school level or equivalent as determined by the department. After passing SPAN 115, students will take the second semester of the elementary sequence, SPAN 122. Three one-hour lectures and two hours of lab.

**122 Elementary Spanish (4)** (TBR: SPAN 1020) An introductory course emphasizing listening, speaking, reading, and writing. Three one-hour lectures and two hours of lab. *Prereq: SPAN 111 or 115 or equivalent as determined by the department.*

**222 Intermediate Spanish (4)** Grammar review, reading, writing and conversation. Three one-hour lectures and two hours of lab. *Prereq: SPAN 122 or equivalent as determined by the department.*

**250 Latin America Today: The Peoples and Cultures of Latin America (3)** An interdisciplinary study of Latin America today, with emphasis on the life-styles, customs, mentality, and overall culture of the peoples of this region. Discussion of current trends in politics, education, media, religion, and literature and the arts (including popular culture) especially as they illustrate important cultural values and attitudes. Consideration of the attitudes of Americans towards the peoples of Latin America and vice versa. Taught in English.

**300 (500) Intensive Conversation in a Foreign Country (3)** In-residence training in the foreign language of the area visited. The course elected must be approved in advance by the Chair of the Department of Modern Foreign Languages. Research project required for graduate credit. *Prereq: SPAN 222 or equivalent.*

**321 (521) Introduction to Spanish Civilization (3)** A descriptive and critical approach to the instruction of Spanish history, geography, reli-

gious, political, social, educational, and economic institutions. Research paper required for graduate credit. *Prereq: SPAN 341 or 342 or departmental approval.*

**322 (522) Introduction to Spanish American Civilization (3)** A descriptive and critical approach to the instruction of Spanish American history, geography, religious, political, social, educational, and economic institutions. Research paper required for graduate credit. *Prereq: SPAN 341 or 342 or departmental approval.*

**341 (541) Advanced Conversation (3)** Emphasizes conversational skills. Oral practice to extend range of topics, vocabulary, fluency, and conversational strategies. Study of the phonetic system of the Spanish language and exercises to improve pronunciation. Grammar appropriate for oral Spanish. Discussions utilizing readings and electronic media such as videos and the internet. Class presentation of research project required for graduate credit. Heritage speakers and those with near-native abilities in Spanish are not eligible to take this course. If they intend to major in Spanish or earn a Certificate of Proficiency, they should see the department chair for a waiver. *Prereq: SPAN 222 or instructor's approval.*

**342 (542) Advanced Composition (3)** Emphasizes composition skills. Written practice to extend range of topics, vocabulary, fluency, and compositional strategies. Grammar and stylistics appropriate for written Spanish. Practice writing expository and creative prose, translations as well as use of internet discussion lists. Class presentation of research project required for graduate credit. *Prereq: SPAN 222 or instructor's approval.*

**350 Masterpieces of Spanish and Spanish-American Literature (in English Translation) (3)** In-depth discussion of selected literary masterpieces from Spain and Spanish-speaking countries in Latin America. Emphasis on characters, themes, and social trends which reflect the culture and traditions of the Hispanic world. No knowledge of Spanish required; taught in English. Does not count towards major, minor or Certificate of Proficiency in Spanish. *Prereq: English 111-112.*

**360 (560) Studies Abroad (3)** In-residence study of the literature, language, or civilization of the area visited. Relevant field trips. Must be approved in

advance by the Chair of the Department of Modern Foreign Languages. Research paper required for graduate credit. *Prereq: SPAN 341 or 342.*

**370 (570) Travel Study (1-3)** A combination of travel and study experiences in the U.S. or abroad designed to enrich students' knowledge of the target foreign language and culture. May be taught as an organized study tour under faculty supervision or as an independent travel and study project with prior department approval. Topics, prerequisites, and course requirements announced in advance. Research paper required for graduate credit. Students may repeat course with change of topic for maximum of six hours credit. Chair of the Department of Modern Foreign Languages approval must be obtained for travel-study courses to count towards minor, major, or Certificate of Proficiency. Not regularly offered.

**381-382 (581-582) Survey of Spanish Literature (3, 3)** Selected readings to give students an acquaintance with important personalities, movements, and ideas in Spanish literature. 381: Beginning to 17th century. 382: 18th century to present. Research paper required for graduate credit. *Prereq: SPAN 341 or 342 or departmental approval.*

**385-386 (585-586) Survey of Spanish American Literature (3, 3)** Selected readings to give students an acquaintance with important personalities, movements, and ideas in Spanish American literature. 385: Discovery (1492) to Romanticism. 386: Realism (late 19th century) to present. Research paper required for graduate credit. *Prereq: SPAN 341 or 342 or departmental approval.*

**401 Foreign Language Internship (3)** Utilization of the target foreign language in a monitored work environment. Appropriate placements may be found locally, nationally, or abroad. Students may or may not be paid. Evaluation by both supervising instructor and on-the-job supervisor. Chair of the Department of Modern Foreign Languages approval must be obtained for internships to count towards minor, major, or Certificate of Proficiency. *Prereq: SPAN 341 or 342.*

**451 (651) The Language of Business and the Professions (3)** Study of the basic terminology and documents of business and various professions as practiced within the Hispanic world. In addition

to business, professions such as communications, travel and tourism, agriculture, and criminology will be covered. Composition of business letters and resumes, translation, and presentation of oral reports. Research paper required for graduate credit. *Prereq: SPAN 341 or 342 or instructor's approval.*

**481 (681) 19th Century Spanish Literature (3)** Study in depth of selected works. *Prereq: SPAN 341 or 342 or instructor's approval.*

**482 (682) Contemporary Spanish Literature (3)** Study in depth of selected works. *Prereq: SPAN 341 or 342 or instructor's approval.*

**486 (686) Contemporary Latin-American Literature (3)** Study in depth of selected works. *Prereq: SPAN 341 or 342 or instructor's approval.*

**491 (691) Spanish and Latin-American Cinema (3)** Study of major works in the Spanish and Latin-American cinema from the 1920s to the present day. The films surveyed will illustrate the development of Spanish and Latin-American cinema and will focus on important socio-political and cultural issues in Twentieth-Century Spain and Latin America. Research paper required for graduate credit. *Prereq: SPAN 341 or 342 or instructor's approval.*

**495-496 (695-696) Topics in Spanish Language, Literature, or Civilization (1-3, 1-3)** Study of selected aspects of Spanish language, literature, or civilization. Taught in Spanish. Topics and prerequisites announced in course schedule. Research paper required for graduate credit. Students may repeat course with change of topic. Only six hours of topics courses may count towards a minor, major, or Certificate of Proficiency. Not regularly offered.

**498-499 (698-699) Independent Study (1-3, 1-3)** Directed reading or research under supervision of a staff member. Available only to Juniors and Seniors having completed at least six hours of upper-division coursework in Spanish. Project must be approved by faculty in the discipline concerned and the department chair. Research paper required for graduate credit. Students may take no more than six hours of independent study.

## Special Education (SPED)

**300 (500) Exceptional Child (3)** An introductory course designed to provide an overview of the field of special education. Principles, characteristics, programs, special needs, legal requirements, and instructional strategies related to the education of handicapped children.

**386 (586) Practicum in Special Education (3)** The initial field experience in special education. Emphasis will be on observation participation. There will be 75 contact hours in P-12, split between at least two settings. *Prereq: SPED 300.*

**387 (587) Practicum in Teaching Exceptional Children (Birth-6) (3)** The initial field-based experience in special education. The course will require a total of 75 contact hours split between two different settings. Optional settings will be school, hospital, Children's Center, and the Head Start program. *Prereq: SPED 300.*

**415 (615) Characteristics and Needs of Children with Disabilities (3)** Examination of various areas of exceptionality including mental retardation, learning disabilities, and behavior disorders. Focus on the evolution of each area and its relationship to the individual, family, society, and education. *Prereq: SPED 300.*

**420 (620) Language Development and Disorders (3)** Principles of normal speech and language development and therapeutic approaches for children between birth and age six. Prevalence and types of speech/language disorders in infants, toddlers and preschool children. Emphasis on identification, prevention, intervention and assessment of language developmental delays for children under age six. *Prereq: SPED 300.*

**425 Sign Language (3)** Manual communication of the deaf, emphasis on expressive and receptive use of finger spelling in a total communication approach. Different manual communication methodologies will be explored. *Prereq: SPED 300.*

**430 (630) Early Childhood-Special Education (3)** This course examines: Growth and development of children from birth to age 9 in the context of family life; etiological factors affecting young children

with developmental delays; cultural, familial, educational, and legal implications; behavioral characteristics of children in early intervention programs; the philosophy, methods, materials, settings and acceptable standards involved in the intervention and instructional procedures of early childhood-special education programs. *Prereq: SPED 300. Recommended prereq: SPED 420.*

**432 (632) Educational Procedures for Children with Exceptionalities (4)** Examination of the relationship between the characteristics and needs of exceptional children and specialized instructional procedures. Development of skills in analyzing curriculum requirements, writing individualized education programs (IEP's), teaching effectively, and evaluating the legal aspects of special education will be emphasized. *Prereq: Admission to Teacher Education and SPED 300.*

**437 (637) Assessment of Exceptional Children (3)** The purpose and how to administer, score, and interpret each test instrument. Assembly of a case study to aid in the diagnosis and treatment of the learner. *Prereq: Admission to Teacher Education, SPED 300.*

**440 (640) Advanced Methods for Students with Mild Disabilities (3)** An examination of the unique needs and particular issues which are specific to students with mild disabilities and at-risk population. The course emphasizes curriculum methodology and approaches in general and special education classes. *Prereq: Admission to Teacher Education, SPED 300.*

**450 (650) Characteristics and Needs of the Gifted/Talented (3)** Historical and societal perceptions, characteristics, needs, psychological and educational considerations and identification of the gifted/talented. *Prereq: SPED 300.*

**451 (651) Strategies and Programs for Teaching the Gifted/Talented (3)** Curriculum development and effective teaching strategies with the gifted/talented in various educational environments. *Prereq: Admission to Teacher Education, SPED 300 and 450 or instructor's approval.*

**460 (660) Behavior Interventions (3)** Advanced strategies for managing social behaviors that impact

on academic learning of mildly, moderately and severely disabled children. Techniques for eliminating maladaptive behaviors, managing aggressive and antisocial students and teaching appropriate social skills for special education students. *Prereq: Admission to Teacher Education and SPED 300.*

**470 Integrating Children with Disabilities in Regular Education (3)** Examination of the programs, materials, teaching techniques and classroom modifications for integrating exceptional learners in regular education. An overview of PL 94-142, IEP as they relate to least restrictive environment. An examination of the regular education staff (attitudes, preparation, resources and coordination) will be addressed. *Prereq: SPED 300.*

**490 (690) Workshop in Special Education: [Title of workshop] (1-3)** Workshop on selected topics. No more than six hours of workshop credit may be applied to a graduate degree in education. *Prereq: Instructor's approval.*

**700 Consultation Approaches and Strategies (3)** Focus on the special educator as one member of a parent/ professional team meeting the needs of exceptional children. Examination of the role of consultation in delivering special education services, definitions of consultations, communication skills, and collaborative strategies.

**710 Advanced Practicum in Teaching Exceptional Children (6)** Advanced special education field-based experience. Focus on refining skills in the sequence of collecting student assessment data, developing IEPs, and establishing instructional programs, as well as examining other facets of special education. *Prereq: SPED 632, 637 (can be taken concurrently with 632).*

## Statistics (STAT)

**325 Statistical Methods (3)** Basic probability distributions, fundamentals of statistical inference, hypothesis testing, one way classification, analysis of variance, covariance, use of variance components and their estimation, comparative experiments, multiple comparisons, and regression. *Prereq: MATH 210.*

**365 (565) Regression Analysis (3)** Measuring the relationship among variables using standard regression techniques. Topics include simple, multiple, and polynomial regression, model fitting, verification of model assumptions, and examination of residuals. *Prereq: MATH 251, 310, and either STAT 325 or ENGR 311 or departmental approval. Credit for both MATH 360 and MATH 365 or STAT 365 (565) will not be allowed.*

**375 (575) Sampling Theory (3)** Mathematical development of sampling. Consideration of simple probability sampling including simple random, stratified random, cluster and multistage sampling. Deriving estimates and variances of estimates for different sampling designs. *Prereq: STAT 325 or ENGR 311 or departmental approval.*

**385 (585) Nonparametric Methods (3)** Alternatives to normal-theory statistical methods; analysis of categorical and ordinal data, methods based on rank transforms, measures of association, goodness of fit tests, order statistics. *Prereq: MATH 251 and either STAT 325 or ENGR 311 or departmental approval.*

**435 (635) Categorical Data Analysis (3)** Analysis of categorical data. Contingency tables, exact tests, loglinear models, analyses involving ordinal variables, binary response models, and multinomial response models. *Prereq: MATH 251 and either STAT 325 or ENGR 311 or departmental approval.*

**455 (655) Design of Experiments (3)** The design and analysis of experiments. Topics include one and two factor analysis of variance, randomized designs, repeated measures, and factorial experiments. *Prereq: MATH 251, and either STAT 325 or ENGR 311 or departmental approval. Credit for both MATH 455 and STAT 455 will not be allowed.*

**461 (661) Probability and Statistics I (3)** Discrete and continuous probability spaces, statistical independence, distributions, discrete and continuous random variables, expectations, moment-generating functions, limiting distributions, estimation of parameters, confidence intervals, hypothesis testing with applications, linear regression and correlation, multiple linear regression. *Prereq: MATH 252, either MATH 314 or CSCI 301, and either STAT 325 or ENGR 311 or departmental approval. Credit for both MATH 461 and STAT 461 will not be allowed.*

**462 (662) Probability and Statistics II** (3) Discrete and continuous probability spaces, statistical independence, distributions, discrete and continuous random variables, expectations, moment-generating functions, limiting distributions, estimation of parameters, confidence intervals, hypothesis testing with applications, linear regression and correlation, multiple linear regression. *Prereq: MATH 320 and STAT 461. Credit for both MATH 462 and STAT 462 will not be allowed.*

**465 (665) Statistical Computing** (3) Applications of major statistical software packages. Emphasizes the use of computers to perform statistical procedures and the interpretation of statistical output. *Prereq: Either STAT 325 or ENGR 311 or departmental approval. Credit for both MATH 465 and STAT 465 will not be allowed.*

**491-492 (691-692) Special Topics [topic title]** (1-3) Selected topics in statistics, student research, or seminar. Course may be repeated with total credits not to exceed six hours. *Prereq: MATH 320, either STAT 325 or ENGR 311, and departmental approval.*

**498 Undergraduate Research Experience I** (2) Introduction to research methodologies and tools including LaTeX and MathSciNet. Presenting mathematics in written and oral formats. Ethics in research. This course includes substantial directed individualized study leading to the preparation of a significant paper. *Prereq: consent of the department chair. Cannot receive credit for both MATH 498 and STAT 498. Grading on a pass or fail basis.*

**499 Undergraduate Research Experience II** (1) The presentation of mathematics works in both oral and written formats. This course will finalize the significant paper begun in MATH/STAT 498 and based on the student's individual research. This will be required that it be presented at a regional or national meeting. *Prereq: MATH 498 and consent of the department chair. Grading on a pass or fail basis.*

## Teacher Education (TCED)

**Note: For student teaching courses** (402-412), students should check their program of study sheet and student teaching application for other student teaching prerequisites specific to their major.

**211 Introduction to Teaching** (1) A course designed to provide prospective teacher education majors with an introduction to teaching as a profession. Includes an overview of the Teacher Education Program (TEP) Conceptual Framework and development of the TEP portfolio.

**301 Foundations of Education** (2) An introductory course designed to provide prospective teacher education majors with an overview of the history and philosophy of education. This course addresses professionalism, history, philosophy and sociology of education; global understanding; diversity and governance in education. The course includes the initial development of a professional portfolio for each student as part of the requirements for completion of a degree within the College of Education and Behavioral Sciences.

**302 Integrated Teaching Strategies** (3) Addresses attitudes, knowledge and skills as defined in the College of Education and Behavioral Sciences Conceptual Framework: teaching and learning styles; strategies for teaching; planning for teaching; models of instruction; classroom management of instruction; and computer literacy. This course will also emphasize oral expression and written communication. Includes field experiences, directed observations, and participation in a public school classroom setting. This course serves as a checkpoint for the teacher education portfolio. *Prereq: Admission to Teacher Education.*

**303 Diagnosis and Evaluation** (3) Designed to develop skills in selecting, constructing, administering, and interpreting instruments appropriate for assessing differing needs and achievement of children and youth. Activities involve classroom testing and development. Includes field experiences, directed observations and participation in a public school classroom setting. This course serves as a checkpoint for the teacher education portfolio. *Prereq: Admission to Teacher Education and TCED 302.*

**305 Classroom Management** (2) A study of skills and techniques facilitative to an effective classroom environment. Emphasis on behavioral management principles, classroom climate analysis, and teacher/pupil rapport building. Includes 20 hours of field experiences, directed observations, and participation in

a public school classroom setting. This course serves as a checkpoint for the teacher education portfolio. *Prereq: Admission to Teacher Education.*

**340 Applied Mathematics and Science (4)** Strategies and materials for teaching mathematics and science in the elementary classroom. Lesson unit plans, participation in developmentally appropriate hands-on activities, simulated and direct-teaching experiences. Includes directed observations and 4 hours small group instruction in classroom settings. *Prereq: Admission to Teacher Education and TCED 302. Coreq: MATH 192 or instructor's approval.*

**350 Applied Social Studies and Language Arts (4)** Strategies and materials for teaching social studies and languages arts in K-8 classrooms. Unit and lesson plans, activities and materials for the classroom, peer teaching. Special emphasis on meeting the needs of diverse learners. *Prereq: Admission to Teacher Education and TCED 302.*

**401 Seminar in Teaching (1)** Structured seminar for advanced discussion of instructional and classroom management, variety in methodology, discipline, school law, professionalism, and related topics. Emphasis will also be placed on oral expression and written communication. Coreq: TCED 402-403 or TCED 404-405 or TCED 404-406 (student teaching courses). *Prereq: Admission to Teacher Education.*

**402 Student Teaching Grades 1-4 (6)** Supervised student teaching in grades 1-4 for a minimum of 7.5 weeks. Must be taken with TCED 401 and TCED 403. *Prereq: Admission to Teacher Education, TCED 301-302-303, all specialized teaching strategies courses and Reading requirements. See note above.*

**403 Student Teaching Grades 5-8 (6)** Supervised student teaching in grades 5-8 for a minimum of 7.5 weeks. Must be taken with TCED 401 and TCED 402. *Prereq: Admission to Teacher Education, TCED 301-302-303, all specialized teaching strategies courses and Reading requirements. See note above.*

**404 Student Teaching Grades 7-8 (6)** Supervised student teaching in grades 7-8 for a minimum of 7.5 weeks. Must be taken with TCED 401 and

TCED 405. *Prereq: Admission to Teacher Education, TCED 301-302-303, all specialized teaching strategies courses and Reading requirements. See note above.*

**405 Student Teaching Grades 9-12 (6)** Supervised student teaching in grades 9-12 for a minimum of 7.5 weeks. Must be taken with TCED 401 and TCED 404 or 406. *Prereq: Admission to Teacher Education, TCED 301-302-303, all specialized teaching strategies courses and Reading requirements. See note above.*

**406 Student Teaching Grades K-8 (6)** Supervised student teaching in grades K-8 for a minimum of 7.5 weeks. Must be taken with TCED 401 and TCED 405 or 407. *Prereq: Admission to Teacher Education, TCED 301-302-303, SPED 300, all specialized teaching strategies courses and Reading requirements. See note above.*

**407 Student Teaching in Special Education (K-12) (6)** Supervised student teaching in special education K-12 for a minimum of 7.5 weeks. Must be taken with TCED 401 and TCED 406. *Prereq: Admission to Teacher Education, TCED 301-302-303, SPED 300, all specialized teaching strategies courses and Reading requirements. See note above.*

**408 Student Teaching in Special Education: Non-School Setting (PreK-1) (6)** Supervised student teaching in special education non-school setting PreK-1 for a minimum of 7.5 weeks. Must be taken with TCED 401 and TCED 407. *Prereq: Admission to Teacher Education, TCED 301-302-303, SPED 300, all specialized teaching strategies courses and Reading requirements. See note above.*

**409 Student Teaching in Kindergarten (6)** Supervised student teaching in kindergarten for a minimum of 7.5 weeks. Must be taken with TCED 403 or TCED 412. *Prereq: Admission to Teacher Education and completion of all specialty area and professional education requirements. See note above. (Same as ECED 409.)*

**450 (650) Designing Curriculum for the Early Adolescent (3)** Review of the specific characteristics and educational needs of early adolescents (grades 6-9). Describes the current middle school movement, its historical antecedents, and the devel-

opment of curriculum appropriate for early adolescents, emphasizing curriculum integration, authentic assessment, student involvement in planning, etc.

*Prereq: Admission to Teacher Education and TCED 302, 340, or 350. Graduate level students will complete a research paper based on a critique, analysis, and/or development of a middle school program model.*

#### **475 (675) Learning and the Kindergarten**

**Child** (4) A four-hour credit course in a state-approved kindergarten placement. It includes a weekly one hour seminar with a faculty member.

*Prereq: for 475--Admission to Teacher Education and TCED 302; TCED 340 or TCED 350 (K-6 majors); ECED 341 or ECED 351 (PreK-3 majors) or permission of instructor; for 675--Admission to Teacher Education. (Same as ECED 475/675.)*

#### **712 Learning Theory and Cognition Applied to the School Setting**

(3) The nature of learning processes and conditions for effective learning and implications for teaching exploration of how learning theory can be applied in the school environment to enhance the learning experience; recent directions in cognitive studies and their general implications for functional classroom use. Projects/activities will be individualized according to the licensure area being sought.

#### **716 Growth and Development in School Age**

**Students** (3) The physiological, sociological, and psychological basis of human behavior with emphasis upon research dealing with the normal student in a school environment. Projects/activities will be individualized according to the licensure area being sought.

#### **780 Principles and Techniques of Teaching**

(3) The course is designed to provide the candidate pursuing initial licensure the opportunity to engage and be acclimated into the public school environment. Emphasis will be placed on integrating the initial conceptual framework into teaching and learning styles, strategies for teaching, planning for instruction, and assessment of initial outcomes. The class will meet for 90 minutes per week and will require 45 clock hours of field work in a previously approved grade appropriate diverse public school setting.

#### **781 Instructional and Management Strategies**

(3) The course will continue to integrate the initial conceptual framework into advanced strategies for teaching, planning for assessment and feedback, with special emphasis on managing the educational environment. The student's portfolio will be readied for admission to student teaching at the appropriate level. The class will meet for 90 minutes per week and will require 45 clock hours of field work in a previously approved diverse public school setting. *Prereq: Admission to Teacher Education and TCED 780.*

#### **791 Master Research Project, K-12**

(4) The culminating professional research project for the Master of Science in Education with a major in Teaching Programs. Seminar topics to include but not limited to educational reform, curriculum design, student achievement, parent involvement, cultural diversity, educational technology, assessments, and educators as collaborative leaders and mentors (in a K-12 setting). *Prereq: EDEV 710 and EDFN 710. May repeat enrollment. P/N only.*

## **Textiles, Clothing and Fashion Merchandising (TCFM)**

#### **102 Fashion Selection and Personal Image**

(3) Principles and elements of design applied to the personal and professional clothing needs of men and women.

#### **103 Clothing Construction and Evaluation**

(3) Basic principles of fitting, pattern alterations, and apparel construction; comparative study of factors influencing quality of ready-made garments. One one-hour lecture and two two-hour labs.

#### **200 Introduction to Fashion Merchandising**

(3) Survey of the fashion business focusing on fashion socioeconomics, principles governing origins, and activities involved in the delivery of goods and services to the consumer, including implications of these factors to apparel merchandising.

#### **300 Clothing and Human Behavior**

(3) Functional and sociocultural aspects of dress and adornment in world cultures. Historical, technological, and economic influences. (Same as WMST 300)

**303 Textiles** (3) Consumer-oriented study of textiles emphasizing properties of fiber and fabric in relation to the selection, use, and care of apparel and household textiles. Two one-hour lectures and one two-hour lab.

**305 Fashion Industry Processes** (3) Survey of the fashion industry from apparel production to marketing and distribution.

**306 Visual Merchandising and Presentation** (3) The exploration of creative techniques utilized in the display of retail merchandise and their effective application to the enhancement of product saleability; to include presentation strategies for use with clients. A study of local and regional markets. *Prereq: INTD 100 or TCFM 202.*

**307 Fashion Promotion** (3) Fashion marketing communication techniques used to promote fashion merchandise. Evaluation of fashion retail sales promotion strategies.

**308 Buying Functions in Merchandising** (3) A comprehensive analysis of the buying structure, institutions, and environments. Emphasis on buying practices, activities, techniques, and underlying concepts fundamental to merchandising; computer applications. Two one-hour lectures and one two-hour lab. *Prereq: MATH 140.*

**309 Fashion Merchandising Tour** (1) Tour of wholesale and retail establishments in national fashion centers. A maximum of three hours credit can be counted toward a major. *Prereq: Family and Consumer Sciences majors only or instructor's permission.*

**405 Fashion History** (3) Apparel from ancient to modern times including a study of past and current designers, factors influencing the development of contemporary fashion.

**412 (612) Environmental Textiles** (3) Selection of textiles based on design, use, and care in environmental applications. *Prereq: TCFM 303 recommended.*

**415 (615) Fashion Design** (3) Principles of fashion design using flat pattern techniques and computer aided design applications; including advanced clothing construction techniques. One one-hour lecture, two two-hour labs. *Prereq: TCFM*

*103 or instructor's approval. Graduate students will be required to complete a research project resulting in a written paper.*

**702 The Textiles and Clothing Consumer** (3) Consumer problems as encountered during the life cycle; legislation and quality standards of current textile products.

**703 Textile and Apparel Industry Issues** (3) Domestic and international issues of current importance in the textile and apparel industry; production, consumption, and governmental policies.

**704 Social, Psychological, and Aesthetic Analysis of Apparel** (3) Analysis of social science theories and concepts applicable to clothing and appearance.

## Theatre (THEA)

**110 Understanding Theatre** (3) (TBR: THEA 1030) An overview of contemporary theatre and drama, initiating basic critical analysis of art and theatre as art in relation to various other art forms and popular entertainment. Particular attention is given to theatre's place in society, its diversity, and its relevance to students today. Notable connections are made between theatre and the familiar world of Hollywood, television, and film. The roles of the actor, director, playwright, and designer are surveyed.

**111 Understanding Theatre** (3) An overview of the history and literature of theatre with various representative theatre eras presented in a broad social, political, and economic context. Critical analysis concerning art and theatre as art in relation to various other art forms and popular entertainment, as it applies to the history of theatre, bringing theatre from the past to life today, is a major component of the course.

**110H Honors Understanding Theatre** (3) A contemporary overview of theatre as an art form. Introduction to the roles of the actor, director, and designer. Basic theory and criticism. For students in good standing in Honors Programs.

**150 Theatre Workshop** (3) Supervised group projects in the construction of sets, painting, lighting, and costume making. Six hours of schedule work per week in preparation for a major production. May be repeated for credit.

**201 Theatre Production (1)** Practical application of theatre studies in a production environment. May be repeated for credit. *Prereq: B.F.A. majors only or permission of instructor.*

**220-221 Acting (3, 3)** Introduction to acting involving improvisation and other exercises. Development of concentration, contact between actors, stage movement, voice production, character/text analysis skills, and confidence. May be taken out of sequence.

**301 Theatre Production (2)** Practical application of theatre studies in a production environment. May be repeated for credit. *Prereq: B.F.A. majors only or permission of instructor.*

**330 Costuming and Stage Makeup (3)** Practical application of costume design concepts and makeup techniques for the stage. *Prereq: THEA 110.*

**360 (560) Stagecraft (3)** Principles of technical theatre including scene construction, stage management, and dramatic production supervision.

**380 Play Interpretation and Direction (3)** Play direction studied through a series of exercises and scene work designed to teach the basic tools of stage composition. Focuses on the use of script analysis and its application to performance. Encourages exploration of a personal technique and style. *Prereq: THEA 220 and 221. May be repeated for credit.*

**390 (590) Playwriting (3)** Writing exercises, scenes, and one-act plays which may be performed in the laboratory theatre. *Prereq: ENGL 111-112 and THEA 110 and 220 or by permission of the instructor. (Same as ENGL 390/590.)*

**391 Special Topics in Theatre (3)** Selected topics for intensive study. Topics and prerequisites to be announced. May be repeated for credit.

**401 Independent Study (3)** Directed study in the area of theatre performance or production. Taught by arrangement. *Prereq: THEA 110, 111 and 220. May be repeated for credit.*

**410 Lighting and Sound Design (3)** The design of stage lighting for the theatre environment includes instrument maintenance, lighting control, color media, shop procedures and electricity. A practical study of sound, sound equipment and sound systems

utilized in sound design for theatrical productions. *Prereq: THEA 110 and 360.*

**420 Advanced Acting (3)** Develops the actor's skill through a systematic course progression of advanced acting techniques including: 1) Styles--Classical Greek, Commedia dell' Arte, and Shakespearean, 2) Realism--scene work and script analysis of plays by Chekhov, Ibsen, and other modern playwrights, 3) Contemporary- improvisation, scene study, and analysis of plays by Tennessee Williams, Sam Shepard, Paula Vogel, and other contemporary playwrights. *Prereq: THEA 220 and 221. May be repeated for credit.*

**430 (630) Scene Design (3)** Development of the total design concept involved in creating scenery for the stage environment. *Prereq: THEA 110 and 360.*

**460 Senior Project (1)** Preparation of any of the following based on the student's area of interest: a portfolio, script, critical research paper, design, acting recital, or direction of a short play. Projects are selected and prepared under the supervision of a theatre faculty member. Mandatory pass/fail.

## University Scholars (UNSC)

**118, 128 Seminar (1, 1)** Discussion-oriented seminars on interdisciplinary topics and investigations of masterpieces of the heritage of Western thought with professors in the disciplines related to the topic leading discussions. Graded on a pass/fail basis.

**218, 228 Reading-Discussion Groups (1, 1)** Each group consists of three to five students and one professor. Each group pursues a different course of study determined by the students and faculty together. Graded on a pass/fail basis.

**318, 328, 418 Specialized Studies (1, 1, 1)** Studies in the student's area of interest with personal guidance by members of the faculty. A natural outcome of the study should be the emergence of a senior project (488). Taught by arrangement and graded on a pass/fail basis.

**488 Senior Project (3)** Students pursue the preparation of significant work under faculty direction (research, artistic performance or composition,

creative writing etc.) The senior project must be approved in advance by the Honors Programs Director and is graded on a pass/fail basis.

## Wildlife Biology (WBIO)

**220 Wildlife Damage Management (3)** Philosophies, principles and concepts related to practical management of wildlife-human conflicts. Includes basic information on the use of traps, toxicants, repellents, exclusion, and other wildlife damage control methods that help resolve damage to property and threats to human health and safety. An integrated management approach is used, considering various techniques along with biological, economic and socio-cultural aspects. Students will weigh these considerations, then use a Wildlife Damage Management Decision Model in formulating management approaches for real-world wildlife conflict situations.

**250 Principles of Wildlife Management (3)** Current principles and practices used in management of wild animals. Includes historical, biological, behavioral, sociological, and economic components. Attention will be given to management tools including control of hunting, predator control, refugia, propagation, and environmental controls. Three-hour lecture.

**300 Principles of Fisheries Management (3)** An introduction to the concepts and approaches in management of freshwater fisheries, with emphasis on regionally important sport fishes. Includes coverage of artificial manipulation of populations and consideration of various user groups such as commercial, recreational, and non-consumptive users. Class sessions may involve outdoor activities.

**301 Special Problems (1-6)** Independent study projects for students exhibiting special interest and abilities in wildlife science. Written project outline and report of results required. Taught only by arrangement prior to registration.

**311 Game Ecology and Management: [Topics title] (3-9)** This course will be offered in 3 sections, each which may be taken for 3 hours credit (9 hours total). The first section, Waterfowl Ecology and Management, deals with the ducks and geese of North America, with an emphasis on those common along

the Mississippi Flyway. The second section, Big Game Ecology and Management, provides a brief overview of the big game of North America, and a more in-depth analysis of those present in Tennessee: white-tailed deer, black bear, wild boar, and elk. The third section, Upland Gamebird Ecology and Management, gives students a general exposure to the turkey, quail, and grouse of North America, and a more in-depth understanding of the ecology and management of those extant in Tennessee: the eastern wild turkey, ruffed grouse, and bobwhite quail. The course will provide students with our most up-to-date scientific knowledge of the ecology of those species, and with a basic understanding of the tools used by wildlife scientists and managers to maintain healthy populations. Students who successfully complete this course will be able to provide an overview of the range and status of the species of interest at a continental scale; detail the range, life history, behavior, and habitat of the species of interest in Tennessee; explain the management history and recovery efforts for the species in Tennessee; understand essential components of habitat management, including establishment of refugia, food plots, native habitat provision, etc; and describe harvest management practices and policy.

**320 White-tailed Deer (1)** A complete study of white-tailed deer including biology, behavior, management, history, social impacts and damage control. Status of the population in Tennessee, food habits, management scenarios throughout the country will be considered, along with taxonomy of the species throughout its range.

**330 Wildlife Biopolitics (3)** Involves the study of special interest/political influences on wildlife management techniques and administration. It specifically outlines cases of management decisions in the Southeast involving big game, small game, furbearers and waterfowl.

**340 Wildlife Law Enforcement and Public Relations (3)** Fundamentals and general principles of local, state and federal laws and regulations governing natural resources and their management. Principles and practices of interacting with the public. *Prereq: Be enrolled in Wildlife Biology or instructor's approval.*

**350 Fish and Wildlife Management Techniques**

(4) This class will expose students to field and laboratory techniques commonly used in management of fish and wildlife populations. Course content includes methods used to capture, mark, and handle animals; determination of age and sex; monitoring of individuals and populations; and population density estimation. Includes field trips requiring walking through strenuous terrain. Three hours lecture and one two-hour lab. *Prereq: MATH 210; be enrolled in Wildlife Biology or instructor's approval.*

**441 Forensic Techniques in Wildlife Biology**

(3) Investigative techniques of collecting preserving and utilizing evidence involving violation of wildlife laws. Includes hair and tissue identification, osteology, wound examination, ballistics, cause and time of death, collecting and handling evidence and expert witness in court. *Prereq: Wildlife Biology or instructor's approval.*

**450 Wildlife Habitat Management** (4) This course will provide students with an understanding of relationships between wildlife and forest, farmland, and wetland habitats. Models and other methods used to quantify wildlife-habitat associations will be examined. Students will explore the concepts of habitat use, selection, and preference; the importance of spatial scale; the significance of plant succession, and the methods for manipulating habitats to increase, decrease, and maintain wildlife populations. Planning, designing, and budgeting wildlife management plans from a private and public land perspective are included. Three-hour lecture and one lab. *Prereq: Be enrolled in Wildlife Biology of instructor's approval.*

**Women's Studies (WMST)**

**100 Lifespan Human Development** (3) Study of human needs and developmental processes across the lifecycle. Examination of individual and family well-being using a systems perspective. (Same as CFS 100)

**201 Introduction to Women's Studies** (3)

Surveys the study of women in society. The primary goal is to explore how gender shapes our views and understandings. A further goal is to explain how class, race, ethnicity and age shape the female experience historically and across cultures. The

relationship between cultural definitions of feminine behavior and the reality of women's lives, roles in work, the family, the arts, politics and the sciences is examined. (Same as IDST 201)

**208 Marriage and Family** (3) The relationships of the family structure to social organization. Particular emphasis focused on the family historically, mate selection, marital adjustment, marital happiness, and divorce in a changing society. (Same as SOC 208)

**220 Understanding Human Diversity and Oppressed Populations** (3) Focuses on the dynamics and consequences of discrimination, economic deprivation and oppression on people of color, women, gay and lesbian persons. Other populations at risk are examined and distinguished by age, ethnicity, culture, class, and physical or mental ability. Exploration of personal and professional beliefs, values, roles and norms of culturally different clients and the use of culture in formulating appropriate intervention. (Same as SWRK 220)

**231 Interpersonal Communication** (3) Study and practical application of principles of communication in face-to-face human interactions. General communication, self-awareness, perception, conflict, listening and interviewing. (Same as COMM 231)

**300 Clothing and Human Behavior** (3) Functional and sociocultural aspects of dress and adornment in world cultures. Historical, technological, and economic influences. (Same as TCFM 300)

**303 Family Relationships** (3) Factors affecting relationships within families throughout the life cycle. Focus on current lifestyles, changing family forms, cultural diversity, and theoretical perspectives. (Same as CFS 303)

**304 Women in American History** (3) Explores the lives of American women through the prism of class, race, and ethnicity—in relationship to each other, to their families, to their work at home and in the public sphere, and to their influence on American society and culture. Beginning with the European settlement of North America and continuing until the present, women's history will be woven into a presentation of the American past. (Same as HIST 303)

## Zoology (ZOOL)

**341 Men and Women: Gender Roles in American Society** (3) An examination of how gender is socially produced, and the implications of gender for individuals, social processes, and social structure. *Prereq: SOC 201. (Same as SOC 341 and ANTH 341)*

**350 Women in the Arts** (3) A specialized study of women artists and their work in a historical context. Issues impacting the role of women artists, women as art subjects and the question of a feminine aesthetic will be analyzed. (Same as ARTH 350) .

**351 Women Writers: Gender, Race, and Class** (3) A historical survey of women writers, including contemporary writers, which focuses on women writers' concern with and presentation of issues such as race, ethnicity, religion, and class. (Same as ENGL 350)

**370 Psychology of Women** (3) This course concerns psychological approaches to studying women. It examines relevant theory and research. Topics include identity and self-concept, relationships and power, sexuality, parenting, work, mental health and women of color. (Same as PSYC 370)

**480 Topics in U.S. History: [Topic Title]** (3) Classes in one or more of the following areas: (a) interdisciplinary approaches to historical periods, and (b) specialized topics suitable for in-depth study. May be repeated for credit (with different topic). Only six hours of undergraduate topics courses (460, 470, 480 or 490) can be counted toward the major or minor. Not regularly offered. (Same as HIST 480 when topic offered is on gender issues in history.)

**495 Comparative Family Systems** (3) An examination of families both cross-culturally and historically. Attention is directed to understanding the variation and similarities in family structures, marital arrangements, premarital relations, gender roles, and socialization. *Prereq: SOC 201. (Same as SOC 495 and ANTH 495)*

**496 Topics [title TBA] in Gender and Cultural Studies** (3) Special topics in gender and cultural studies issues in literature. May be repeated with variation in topic. (Same as ENGL 495 when topic offered is on women's literature and issues.)

**201 Human Anatomy and Physiology** (4) An introductory course surveying the structure and function of the organ systems of man with major emphasis on the coordinated functioning of the human body. Three one-hour lectures and one two-hour lab. ZOOL 201 may not substitute for ZOOL 251. Student cannot receive credit for both ZOOL 201 and ZOOL 251. *Prereq: BIOL 110 or 140 or MBIO 251.*

**251 Human Anatomy and Physiology I** (4) (TBR: BIOL 2010) This course provides a brief introduction to basic chemistry and the fundamentals of cell biology, and focuses on the structure and function of the integumentary, skeletal, muscular, and nervous systems. Three one-hour lectures and one two-hour lab.

**304 Comparative Vertebrate Anatomy** (5) Classification and phylogeny of the vertebrates, followed by a detailed study of integumentary and skeletal systems of a variety of forms. Dissections of dogfish shark, necturus, and cat, with emphasis on digestive, respiratory, circulatory, urogenital, and nervous systems. Three one-hour lectures and two two-hour labs. *Prereq: BIOL 110-120 or 130-140.*

**315 Invertebrate Zoology** (4) Phylogeny, morphology, and ecology of invertebrate animals exclusive of insects and parasites. This course requires field work involving physical activity. Three two-hour lectures/laboratory classes. *Prereq: BIOL 110-120 or 130-140.*

**319 Mammalogy** (3) Biology, natural history, classification and identification of mammals with emphasis on the local fauna. This course requires field work involving physical activity. Two one-hour lectures and one three-hour lab. *Prereq: BIOL 110-120 or 130-140.*

**320 Ichthyology** (3) Identification, classification, distribution, life history, and economic importance of fishes. This course requires field work involving physical activity. Two one-hour lectures and one three-hour lab. *Prereq: BIOL 110-120 or 130-140.*

**321 Ornithology** (3) Introduction to external structure, classification, migration, behavior, and phylogeny of birds. Most laboratory periods are

spent studying birds in the field. This course requires field work involving physical activity. Two one-hour lectures and one three-hour lab. *Prereq: BIOL 110-120 or 130-140.*

**322 Herpetology (3)** Introduction to the study of reptiles and amphibians including structure, classification, distribution, ecology, behavior and identification. Emphasis is on local species. This course requires field work involving physical activity. Two one-hour lectures and one three-hour lab. *Prereq: BIOL 110-120 or 130-140.*

**325 Economic Entomology (3)** A study of the biology, ecology, and management of local arthropods with emphasis on insects. Emphasis on both the negative impact arthropods have on man's health, his agricultural practices, and problems associated with upkeep of dwellings and on the positive aspects of arthropods as food sources, pollinators, decomposers, and biological control agents. This course requires field work involving physical activity. Two one-hour lectures and one two-hour lab. *Prereq: BIOL 110-120 or 130-140.*

**326 (526) Aquatic Macroinvertebrates (3)** An introduction to the study of freshwater macroinvertebrates including structure, classification, ecology, and identification. This is a field course taught at the Reelfoot Lake Research and Teaching Center in Samburg, TN. The course requires field work involving physical activity. Three weeks (M-F) of full day, combined lecture and laboratory sessions. *Prereq: BIOL 110-120 or 130-140.*

**328 Natural History of the Vertebrates (3)** Life modes of various types of vertebrates. Identification of common, local, and American species, distributions, life histories, and ecology. Recommended for students in elementary or secondary education or biology students who do not intend to take other vertebrate morphology courses. This course requires field work involving physical activity. Two one-hour lectures and one three-hour lab. *Prereq: BIOL 110-120 or 130-140.*

**352 Human Anatomy and Physiology II (4)** (TBR: BIOL 2020) This course focuses on the structure and function of the endocrine, reproductive, digestive, respiratory, excretory, lymphatic, immune,

and cardiovascular systems, with additional emphasis on blood, metabolism, and the maintenance of fluid and electrolyte balance. Three one-hour lectures and one two-hour lab. *Prereq: ZOO 251 or instructor's permission. Students may not receive credit for both ZOO 252 and ZOO 352.*

**440 (640) General Parasitology (4)** A study of animal parasites. Emphasis on morphology, taxonomy, life history, ecology, and host-parasite relationships. Three two-hour lecture/laboratory classes. *Prereq: BIOL 110-120 or 130-140.*

**441 (641) Animal Ecology (3)** Basic principles of animal ecology and population biology. *Prereq: BIOL 110-120 or 130-140.*

**442 (642) Animal Ecology Laboratory (1)** Laboratory studies of the methods of animal ecology. This course requires field work involving physical activity. One two-hour lab. Coreq: ZOO 441.

**443 Animal Behavior (3)** A course designed to expose students to the ecological, evolutionary, physiological, and psychological aspects of animal behavior in a wide variety of animals. Laboratory exercises with animals in their natural environment or in a laboratory setting focus on observational and experimental techniques used in current animal behavior research. This course requires field work involving physical activity. Two one-hour lectures and one two-hour lab. *Prereq: BIOL 110-120 or 130-140.*

**461 (661) Histology (3)** The study of characteristics and properties of primary normal animal tissues and special histology dealing with the arrangement and adaptations of tissues in organs. One one-hour lecture and two two-hour labs. *Prereq: BIOL 110-120 or 130-140.*

**710 Entomology for Teachers (4)** A survey of the class Insecta including morphology, physiology, ethology, ecology, and taxonomy of insects. Both field and laboratory experiences in collecting, identification, and collection maintenance are included.

**713 Selected Topics in Geometry for Teachers (3)** Selected topics in geometry through student research, seminars, or workshops. *Prereq: Departmental approval.*