



COURSE DESCRIPTIONS

2026-2027 ACADEMIC YEAR

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COURSE DESCRIPTIONS

All course descriptions are arranged in alphabetical order by course or program prefix, then by numerical order within the prefix. Included in the description is the course prefix and number, name of course, number of credit hours, brief overview of course content, any required course prerequisites, the semester the course is offered and general education codes, if warranted.

COURSE NUMBERING

Each course carries a four-digit number. The first digit indicates the class year in which the course is usually taken; the second and third digits identify the course within the subject field; and the last digit indicates the number of credit hours the course carries. A course number beginning with "0" indicates that the course does not carry credit hours applicable to a degree. A course number ending with "0" indicates that it is a variable hour course, and you will work with a student success coach and the instructor to determine the number of credit hours for the course.

GENERAL EDUCATION CODES

These code letters identify courses used to fulfill general education requirements:

- (H) = Humanities
- (L) = Scientific Investigation
- (N) = Natural Science
- (S) = Social Science
- (A) = Analytical & Quantitative Thought
- (D) = Diversity, Humanities, Social Science

TERM CODES

The following codes listed after each course description indicate when the course will normally be offered.

- (FA) = Fall semester
- (SP) = Spring semester
- (SU) = Summer semester

Courses are not guaranteed to be offered every term. Students are encouraged to consult the class schedule posted online and work with their Student Success Coach to determine their best path.

AI USE FLAGS

The following codes listed after each course description indicate the level a student can use generative AI programs:

[GREEN] = In courses marked with a green flag, students may use artificial intelligence (AI) tools to enhance their learning and creativity. Students are welcome to use AI tools as supplementary resources to assist with assignments, provided they do so ethically and responsibly. Instructors may also incorporate AI tools into certain assignments. Students must properly cite any AI tools used. These tools cannot replace a student's critical thinking or analysis, nor should they be used to avoid engaging with the course content. Students are fully responsible for any mistakes or errors made by the AI tools. For group assignments, students must discuss the use of AI tools with their group members and agree on how to utilize and cite them. Transparency with the instructor regarding the use of AI tools is essential.

[ORANGE] = In courses marked with an orange flag, students may use artificial intelligence (AI) tools as supplementary resources to assist with their assignments, provided they do so ethically and responsibly. Instructors may also incorporate AI tools into certain assignments. Students can think of these tools as aids for learning rather than as tools to entirely create work for assignments such as discussion boards, written posts, and presentations. Proper citation of any AI tools used is required. AI tools cannot replace a student's critical thinking or analysis, nor should they be used to avoid engaging with the course content. Students are fully responsible for any mistakes or errors made by AI tools. For group assignments, students must discuss the use of AI tools with their group members, agreeing on how to utilize and cite them. Transparency with the instructor regarding the use of AI tools is essential.

[RED] = In courses marked with a red flag, students are prohibited from using artificial intelligence (AI) tools. Students are expected to uphold academic integrity by completing their work honestly and transparently. The use of any AI programs (such as ChatGPT, Grammarly, Google Gen, other chatbots, text generators, paraphrasers, summarizers, solvers, etc.) to write or line edit work is considered a violation of the Academic Integrity policy. All written assignments must be composed, revised, and edited by the student in English without the assistance of AI, composition-producing, or auto-editing software.

If a student is uncertain about what AI use is allowable, then they are strongly encouraged to work with their instructor prior to the assignment's deadline.

AGRICULTURE COMMUNICATIONS (AGCM)

AGCM 2113 – Introduction to Agricultural Communications

This course focuses on the fundamentals of agricultural news writing and other communication methods. Students will learn about careers in and the role of the media in agriculture and related fields. *Prerequisite: ENGL 1113* [RED]

AGCM 2300 – Special Topics in Agriculture Communications

The study and/or analysis of a selected topic in Agriculture Communications. Individual and/or group study. May be repeated with a different topic. *Prerequisite: instructor consent.* [RED]

AGRICULTURE ECONOMICS (AGEC)

AGEC 1011 – Agricultural Economics and Agribusiness Experience

Developing connections between the student's major curriculum, career goals specific to agricultural economics or agribusiness, and networking with other students, faculty and alumni. [RED]

AGEC 1113 – Introduction to Agriculture Economics

(S) Economic theory of production, marketing, and consumption of agricultural products and natural resources. The role and structure of agricultural sciences and natural resources within the American economy. Policies to achieve efficiency and welfare goals in agriculture. [RED]

AGEC 2300 – Special Topics in Agriculture Economics

The study and/or analysis of a selected topic in Agriculture Economics. Individual and/or group study. May be repeated with a different topic. *Prerequisite: instructor consent.* [RED]

AGEC 2303 – Food Marketing to a Diverse Population

(D) Food and beverage demand and preferences of socially and ethnically constructed groups in American Society. Real life issues of marketing to a diverse population, including Native, Asian, African and Hispanic Americans, and low-income populations. [RED]

AGEC 2313 – Case Studies in Agricultural Trade and Development

Real world issues in international trade and development of agricultural and food products. Development of an understanding of issues facing policymakers, producers, consumers, and other groups in examining the costs and benefits of various trade and development programs. *Prerequisites: BUSN 2113 or BUSN 2213 or BUSN 2713.* [RED]

AGRICULTURE EDUCATION (AGED)

AGED 2011 – Topics and Issues in Agricultural Education

An exploration into the world of teaching secondary agricultural education with a focus on the role and purpose of the comprehensive agricultural education program. Observation of teachers in an experiential manner by actively interviewing agricultural education teachers, school principals, and appropriate state staff; assisting with FFA activities; and observing students' SAE opportunities. (SP) [RED]

AGED 2300 – Special Topics in Agriculture Education

The study and/or analysis of a selected topic in Agriculture Education. Individual and/or group study. May be repeated with a different topic. *Prerequisite: instructor consent.* [RED]

AGRICULTURE ENGINEERING (AGEN)

AGEN 1413 – Introduction to Engineering in Agriculture

Application of the physical and engineering sciences to agricultural problems. Energy; energy conversion; thermal, electrical, mechanical and fluid systems; equipment calibration; environmental control of agriculture buildings and irrigation system requirements. [RED]

AGEN 2300 – Special Topics in Agriculture Engineering

The study and/or analysis of a selected topic in Agriculture Engineering. Individual and/or group study. May be repeated with a different topic. *Prerequisite: instructor consent.* [RED]

AGEN 2313 – Surveying

A study of the equipment and practices used in Surveying for small areas. Common practices of plane surveying: differential, profile, and topographic leveling; field notes, accuracy and precision, error and error control and land measurement. This course is cross listed with AGRI 2313. [RED]

AGRICULTURE EQUINE TECHNOLOGY (AGEQ)

AGEQ 1113 – Skeletal Equine Anatomy and Technology

The course is a survey of the structure of the horse. The student is required to learn all bones, muscles, and tendons in the anatomy and physiology of the horse. This course also includes basic health indications and first aid treatments. (FA) [RED]

AGEQ 1123 – Internal Equine Anatomy and Technology

Course includes the study of the respiratory, circulatory, digestive, urinary, and nervous systems. Additional topics include basic genetics and a practical study of feeds, nutrition, and ration balancing. (SP) [RED]

AGEQ 1132 – Equine Evaluation

The study of equine selection procedures as a form to function process. Incorporates the application of oral reasons. [RED]

AGEQ 1225 – Basic Care and Training

This course has two sections. Section 1, Western Equitation, develops student's basic riding skills and prepares them for colt training in AGEQ 1235, Advanced Care and Training, course. Section 2, students care for, gentle, and train an unbroken horse. (FA) *Prerequisite: instructor consent.* [RED]

AGEQ 1235 – Advanced Care and Training

This class is divided into two sections. In each section students will be assigned a green-break colt to advance beyond the objectives of AGEQ 1225, Basic Care and Training course. (SP) *Prerequisites: AGEQ 1225 and instructor consent.* [RED]

AGEQ 1401 – Equine Behavior and Handling

Equine management techniques – understanding equine behavior and anatomy. Basic equine handling, management principles, hoof care, dental care, first aid and wound care. Introduction to behavior and training of the horse, techniques of safe handling based on the principles of equine behavior. This course is cross listed with ANSI 1401. [RED]

AGEQ 2123 – Equine Advertising and Marketing

This course is designed to study and understand the skills and knowledge needed to advertise and sell horses. It includes the study of different methods of sale and advertising media layout. (FA) [RED]

AGEQ 2133 – Equine Breeding and Management

A course designed to review the reproductive systems of the horse. Includes field trips to various breeders to study breeding methods. (SP) [RED]

AGEQ 2142 – Equine Halter and Performance Evaluation

Students will be given the opportunity to apply the basic techniques of Equine Evaluation as it pertains to actual judging experience. It includes evaluation of conformation and performance, and expression of oral reasons. [RED]

AGEQ 2225 – Specialized Equine Training

This course is divided into two sections. Section 1, English Equitation, introduces students to beginning English equitation. Proper body, hand, and leg placement and control are stressed. In Section 2, the student is required to advance a horse beyond the objectives of AGEQ 1235, Advanced Care and Training. Upon selection of the approach that best meets the students' interests, students will advance a horse from a "pleasure" or a "working performance" approach, both disciplines advancing toward a "more finished" horse. (FA) *Prerequisites: AGEQ 1235 and instructor consent.* [RED]

AGEQ 2235 – Advanced Performance Training

Students will be assigned a green-break horse to advance beyond the objectives met in AGEQ 1225 and AGEQ 1235. (SP) *Prerequisites: AGEQ 1225, AGEQ 1235, and AGEQ 2225 or instructor consent.* [RED]

AGEQ 2245 – Equine Externship

Students will be placed under the guidance of a prominent horseman in the industry who specializes in the students' main area of interest. At the end of the externship, the student will return to the campus for a seminar and analysis. Externships may be assigned during summer between freshman and sophomore years. *Prerequisite: instructor consent.* [RED]

AGEQ 2250 – Individual Practicum

Designed to meet the needs of individual students who are not participating in the Externship Program. The student will green-break a horse and continue with it through advanced training under minimal supervision. *Prerequisite: instructor consent.* [RED]

AGEQ 2300 – Special Topics in Equine Technology

The study and/or analysis of a selected topic in Equine Technology. Individual and/or group study. May be repeated with a different topic. *Prerequisite: instructor consent.* [RED]

AGEQ 2401 – Hoof Care Basics

Identify correct anatomy, proper steps and skills to trim front and hind feet for the performance horse. (FA) [RED]

AGEQ 2411 – Agriculture Construction Braiding

Proper tying techniques for halter and leads. Platt braids 3, 4, 5, 6, 7, and 8. Industry application of braids. (SP) [RED]

AGEQ 2412 – Rodeo Sports and Equine Performance

Overall event horsemanship; Proper conditioning and health for specific competitive rodeo events; Safety and daily nutrition needs; Travel techniques for equine. *Prerequisite: instructor consent.* (FA) [RED]

AGEQ 2421 – Introduction to Leatherworking

Beginning repair of strap goods; Basic skills in preparation, cutting out, casing, setting up and completion of simple leather project. (FA) [RED]

AGEQ 2422 – Advanced Rodeo Sports and Equine Performance

Advanced horsemanship skills; Training techniques; Horse health management; Multiple event training; Daily nutrition management skills and training; Stall maintenance and safety. Event horsemanship skills. (SP) [RED]

AGRICULTURE LEADERSHIP DEVELOPMENT (AGLE)

AGLE 1511 – Introduction to Leadership in Agricultural Sciences and Natural Resources

Introduction to the concept of leadership as a field of study. Emphasis placed on the application of acquired knowledge to practical problems. (FA) [RED]

AGLE 2300 – Special Topics in Agriculture Leadership Development

The study and/or analysis of a selected topic in Agriculture Communications. Individual and/or group study. May be repeated with a different topic. *Prerequisite: instructor consent.* [RED]

AGLE 2303 – Agricultural Leaders in Society

(S) Analysis of agricultural leaders and societal impacts. Theories of authentic leadership and values-based leadership. Organizational, community, and workforce changes including diversity. [RED]

AGLE 2403 – Agricultural Leadership in a Multicultural Society

(D, S) The study of leadership as it relates to a multicultural society. Cultural changes in the agricultural workplace and future impact on the industry. Personal barriers to fulfilling leadership roles in the agricultural sciences and natural resources. Skills related to managing teams in a diverse workplace specifically related to differences in gender, race, and ethnicity. [RED]

AGRICULTURE (AGRI)

AGRI 1111 – Agriculture Orientation

Required of all agriculture students. Methods of study, advertisement, organization of curriculum, and discussion of requirements and job opportunities in the various fields of agriculture. (FA) [RED]

AGRI 2003 – Agriculture in the Environment

A study of contemporary issues related to agriculture and the environment including conservation of natural resources, water quality, use of fertilizer and chemicals, intensive animal production, animal well-being, land utilization, and use of genetically engineered plants and animals. [RED]

AGRI 2010 – Agriculture Internship

An educational experience for the student to receive a working knowledge of ranch activities and management practices. The student will be placed at a progressive cattle ranch under the guidance of the ranch manager. At the conclusion of the internship, the student will give a summative presentation of the experience. *Prerequisites: instructor consent.* [RED]

AGRI 2013 – Elementary Statistics for Agriculture

(A) An introductory course in the theory and methods of statistics. Descriptive measures, elementary probability, samplings, estimation, hypothesis testing, correlation, and regression. (SP) [RED]

AGRI 2041 – Career Development in Agriculture

Develop personal goals in agriculture through identification of personal values, skills building, exploring professional opportunities, and networking. (FA) *Prerequisite: sophomore standing.* [RED]

AGRI 2111 – Career Exploration in Agricultural Sciences and Natural Resources

Application of the career planning cycle and detailed exploration of career opportunities in the agricultural industry and natural resources field. [RED]

AGRI 2113 – Microcomputer Techniques in Agriculture

An introduction to the operation and capabilities of microcomputers in agricultural applications. Course content will include the development of basic internet skills in addition to word processing spreadsheet design and application, data management, and graphics/presentation development. Meets the computer literacy requirement for the two-year degree and for most four-year degree plans. [RED]

AGRI 2300 – Special Topics in Agriculture

The study and/or analysis of a selected topic in Agriculture. Individual and/or group study. May be repeated with a different topic. *Prerequisite: instructor consent.* [RED]

AGRI 2303 – Agriculture Ecology and Natural Resources

Introduction into general agriculture practices and their short term and long-term effect on the local to global environment. Emphasis on relationships between agriculture systems including livestock and plant production and includes effects on water and soil quality. Topics include organic systems, native and introduced species and invaders, cause and effect of agriculture practices, carbon imprint, species diversity and long-term management and maintenance practices and uses. [RED]

AGRI 2423 – An Analysis of American Agriculture

(H) Overview of American Agriculture and its development from the Revolutionary period to the present and an analysis of Agriculture in the development of the nation; including ethical issues and cultural value to historic and contemporary agriculture; cultural and environmental responses and application of technology in the industry. Includes topics on Ecology, Conservation, farm programs and farm movements. Evolution of agriculture from 1800 through the 20th century including mechanization, motorization, refrigeration, and specialization. [RED]

AGRICULTURE RANCH MANAGEMENT (AGRM)

AGRM 1002 – Ranch Operations and Maintenance

An introduction to the operating techniques and current methods of constructing fences, corral design, show and sale facility design, planting for grazing systems, farm fences, corral design, show and sale facility design, planning for grazing systems, and farm equipment maintenance. **(SP) [RED]**

AGRM 1112 – Show and Sale Cattle Preparation

A hands-on introduction to the topics of daily care, feeding, grooming, and exhibition of cattle. The students will gain practical knowledge and experience current trends and new techniques in preparation and presentation of show cattle. **(FA) [RED]**

AGRM 2012 – Ranch Records and Registrations

A study of the basic records needed for beef cattle management and registrations for purebred cattle. This course will look in depth at methods of record keeping and herd reporting for many breeds of registered cattle. **(SP) [RED]**

AGRM 2103 – Animal Health and Applied Reproduction

This course is designed to gain an understanding and hands-on experience of the current methods of vaccinations, castration, dehorning, animal identification, artificial insemination, pregnancy detection, and embryo transfer in cattle. Students will obtain certification for Bovine Artificial Insemination and Palpation. **(FA) [RED]**

AGRM 2112 – Advanced Show and Sale Cattle Preparation

A lab-based course covering the topics of daily care, health management, hoof trimming, clipping, and exhibition. The students will gain the advanced skills needed to be successful in the presentation of show and sale cattle. **(SP) [RED]**
Prerequisite: AGRM 1112. [RED]

AGRONOMY (AGRO)

AGRO 1113 – Land, Life, and the Environment

(N) Provides information about soils at local, regional, national, and global scales as well as basic soil properties and how they are influenced by human activity. Discussion topics include soil's importance to world food security and human health, agricultural production, environmental quality, and sustainable ecosystems. Students will gain practical knowledge of sustainable soil management in support of the production and ecological regulator functions of the soils. [RED]

AGRO 1213 – Introduction to Plant and Soil Systems

Introduction to the concepts of plant and soil systems including cropland, rangeland, and pastureland. A systems approach to the importance of plant and soil resources to the producer, consumer, and citizen; modern management and production practices; maintenance of natural resources. [RED]

AGRO 2013 – Applied Plant Science

Application of agronomic principles to the management, improvement, and use of plants. Structure and growth of crop plants relating to management strategies and adaptation to varying abiotic and biotic factors. Hands-on identification of crops, weeds, and seed quality factors, application of tools and techniques. *Prerequisite: AGRO 1213, BIOL 1404, or HORT 1013.* [RED]

AGRO 2124 – Fundamentals of Soil Science

(N) Introduction to soil physical, chemical and biological properties and processes necessary in formulating land use decisions related to agricultural, engineering and environmental concerns. Soil formation, classification and conservation. Analysis/evaluation of soils in field and laboratory settings. [RED]

AGRO 2300 – Special Topics in Agronomy

The study and/or analysis of a selected topic in Agronomy. Individual and/or group study. May be repeated with a different topic. *Prerequisite: instructor consent.* [RED]

AMERICAN STUDIES (AMST)

AMST 2103 – Introduction to American Studies

(H, S) Introduction, via topical case studies, to some of the major themes, methods and materials used in the interdisciplinary study of American culture and society. [RED]

ANIMAL SCIENCE (ANSI)

ANSI 1112 – Introduction to Competitive Livestock Judging and Reasons Development

Students enrolled in this course will actively compete throughout the nation representing Connors State College. Identifying tools for evaluation and visual appraisal in the evaluation of cattle, swine, sheep, horses, and poultry. Students will develop oral communications and reasoning skills to master the art of presenting sound reasons to support their evaluation of livestock. *Prerequisite: instructor consent. (FA)* [RED]

ANSI 1124 – Introduction to the Animal Sciences

Students are introduced to the production, marketing, and distribution of meat, milk, eggs, and other animal products. Also includes the study of commodity specialization, world need, and distribution of farm animals. [RED]

ANSI 1401 – Equine Behavior and Handling

Equine management techniques – understanding equine behavior and anatomy. Basic equine handling, management principles, hoof care, dental care, first aid and wound care. Introduction to behavior and training of the horse, techniques of safe handling based on the principles of equine behavior. This course is cross listed with AGEQ 1401. [RED]

ANSI 2113 – Livestock Health and Diseases

Diseases of farm animals, both infectious and noninfectious, parasites, parasitic diseases, and the establishment of

immunity with the use of biological products, prevention, and/or treatment. *Prerequisite: ANSI 1124* [RED]

ANSI 2112 – Introduction to Competitive Meat and Carcass Evaluation

Evaluation of carcasses and wholesale cuts of beef, pork, and lamb with competitive participation at select contests across the nation representing CSC. Develop an understanding in identifying the tools associated with grading of carcasses and of wholesale cuts. Industry factors influencing the value and labels assigned of livestock by the USDA and the industry. Developing reasoning skills for evaluation. Major species will consist of Beef, Pork and Lamb. *Prerequisite: instructor consent.* (SP) [RED]

ANSI 2122 – Live Animal Evaluation

Using tools for selection, including performance records, pedigree information, and visual appraisal in the evaluation of cattle, swine, sheep, horses, and poultry. (FA) [RED]

ANSI 2123 – Livestock Feeding

Nutrients and their functions, nutrient requirements of the various classes of livestock; composition and classification of feed stuffs and ration formulation. Not required of Animal Science Majors. (SP) [RED]

ANSI 2233 – The Meat We Eat

Overview of all animal, poultry, and fish protein sources used for human consumption, but focusing on red meat. Examination of each phase of production, inspection, safety, grading, processing, preparation, and current issues of the industries. Development of an understanding of the importance of meat in the diet and part of global agriculture. This course is cross listed with FDSC 2233. [RED]

ANSI 2253 – Meat Animal and Carcass Evaluation

Evaluation of carcasses and wholesale cuts of beef, pork, and lamb. Factors influencing grades, yields, and values in cattle, swine, and sheep. This course is cross listed with FDSC 2253. (SP) *Prerequisite: ANSI 1124.* [RED]

ANSI 2300 – Special Topics in Animal Science

The study and/or analysis of a selected topic in Animal Science. Individual and/or group study. May be repeated with a different topic. *Prerequisite: instructor consent.* [RED]

ANSI 2402 – Purebred Sales and Promotions

Students study the organization and management of livestock sales. Students also learn advertising, photography, ad copy layout, animal selection, catalog, and animal preparation. This course also includes clerking, sales budget, receipt of payments, and transferring of registration papers. Class will conduct performance tested bull sale. (FA) [RED]

ART (ART)

ART 1113 – Fundamentals of Art I

(H) This course is a study of the principal elements of two-dimensional design. Those elements include color, perspective, fundamental drawing, concepts, and compositional elements. By using a variety of materials students will apply the information to a series of studio assignments. [RED]

BIOLOGY (BIOL)

BIOL 1113 – Introduction to Environmental Science

(N) Scientific study of interaction among organisms, including humankind, with each other and their physical environment including sustainable resource management and the impacts of human populations and activities. *Prerequisite: College-level placement in reading, mathematics, and English or concurrently enrolled in co-requisite instruction.* [RED]

BIOL 1114 – General Biology

(N, L) Introductory major's biology course with lab. This course includes an overview of fundamental biological concepts including metabolism, homeostasis, heredity, evolution, and ecology at the cellular and organismal levels. It provides the foundation for other advanced courses in the biological sciences. *Prerequisite: College-level placement in reading,*

mathematics, and English or concurrently enrolled in co-requisite instruction. [RED]

BIOL 1123 – Evolution and Diversity

(N) An introduction to the origins of living organisms and the mechanisms of evolution that gave rise to the current diversity of species. Includes coverage of the origins and characteristics of major groups in the three domains of living organisms. *Prerequisite: College-level placement in reading, mathematics, and English or concurrently enrolled in co-requisite instruction.* [RED]

BIOL 1131 – Investigative Laboratory

(L) A practical introduction to scientific inquiry, including hypothesis development, experimental design, data collection, data analysis, and interpretation. *Prerequisite: College-level placement in reading, mathematics, and English or concurrently enrolled in co-requisite instruction.* [ORANGE]

BIOL 1314 – Anatomy and Physiology I

(N, L) Anatomy is the study of the structure of the body and physiology is the study of the function of the body. This course introduces the student to the human body, chemistry, cells, and tissues and emphasizes the integration of the integumentary, skeletal, nervous, and endocrine body systems. This course is designed for students in Allied Health or Nursing programs. See advisor and degree plan for program and transfer information. *Prerequisite: College-level placement in reading, mathematics, and English or concurrently enrolled in co-requisite instruction.* [RED]

BIOL 1324 – Anatomy and Physiology II

(N, L) Anatomy is the study of the structure of the body and physiology is the study of the function of the body. This course introduces the student to the human body and emphasizes the integration of the muscular, cardiovascular, lymphatic, respiratory, digestive, urinary and reproductive body systems. This course is designed for students in Allied Health or Nursing programs. See advisor and degree plan for program and transfer information. *Prerequisite: C or better in BIOL 1314.* [RED]

BIOL 1404 – General Botany

(N, L) Introductory majors course covering the study of plants and related organisms with lab. May include key concepts in biology. **(FA)** *Prerequisite: College-level placement in reading, mathematics, and English or concurrently enrolled in co-requisite instruction.* [RED]

BIOL 1604 – General Zoology

(N, L) Introductory majors course covering the study of animals and related organisms with lab. Topics include such areas as taxonomy, systematics, anatomy, physiology, ecology, behavior, and evolution. **(SP)** *Prerequisite: College-level placement in reading, mathematics, and English or concurrently enrolled in co-requisite instruction.* [RED]

BIOL 2104 – Human Anatomy

(N, L) Single semester human anatomy majors course with lab. Minimum of four semester hours (lecture plus lab) credit. A study of the structure of the cells, tissues, organs, and organ systems of the human body. Lab materials include either human cadaver or other appropriate mammalian dissections. *Prerequisite: C or better in BIOL 1114 or equivalent biological laboratory course.* [RED]

BIOL 2114 – Human Physiology

(N, L) Single semester human physiology majors course with lab. A study of the function of the cells, tissues, organs, and organ systems of the human body. Minimum of four semester hours (lecture plus lab) credit. *Prerequisite: C or better in both BIOL 1114 and CHEM 1315.* [RED]

BIOL 2124 – General Microbiology

(N, L) Introductory majors course in microbiology with a minimum of three clock hours of laboratory per week. Minimum of four semester hours (lecture plus lab) credit. A survey of viruses, bacteria, algae, fungi, and protozoa with the emphasis on morphology, methods, metabolism, genetics, life histories, and control. *Prerequisite: C or better in BIOL 1114 or equivalent biological laboratory course.* [RED]

BIOL 2300 – Special Studies in Biology

The study and/or analysis of a selected topic in biology. Individual and/or group study. May be repeated with a different topic. *Prerequisite: instructor consent.* [ORANGE]

BIOL 2313 – Human Ecology

(N) The examination of the social aspects of humans in a human-centered ecological system. Discussion of population, human culture versus nature, institutions for environmental control and other appropriate topics will be covered.

Prerequisite: C or better in BIOL 1114 or equivalent biological laboratory course. [RED]

BIOL 2403 – General Entomology

(N, L) A general study of the biology and taxonomy of insects and closely related animals. Topics include anatomy, physiology, reproduction, metamorphosis, classification, and control of insects as well as the medical, agricultural, and economic impact of insects on the quality of human life. Lab will include identification and labeling of insects in an insect collection. *Prerequisite: C or better in BIOL 1114 or equivalent biological laboratory course.* [RED]

BUSINESS (BUSN)

BUSN 1113 – Business Principles

Designed to acquaint the student with the modern business world. It compasses business organization, records, financial organization risks, personnel, marketing, business association, business and its public. [ORANGE]

BUSN 2013 – Personal Finance

An introductory course covering the various problems of individual / consumer financial management. Recommended course content topics include personal budgeting, consumer loans and installment loans, credit cards and charge accounts, personal insurance, savings accounts, investments, social security, housing options, commercial bank services, financial institution services, personal taxes, wills, estate planning, retirement planning, career planning, financial planning, and leasing arrangements. [FA] [RED]

BUSN 2023 – Introduction to Entrepreneurship

Engaging entrepreneurial mindset and the process of starting and expanding a new venture. Examines innovation, value creation, the business environment, established companies, and aspects of business or life relevant to entrepreneurship. [RED]

BUSN 2123 – Business Finance

An introductory course covering the various problems involved in the financing of the business firm. Recommended course content topics include financial planning and forecasting, capital budgeting, time value of money, cost of capital, financial statement analysis, security valuation, risk analysis, capital structure theory, working capital management, business taxation, asset mix, and sources of capital. [SP] [RED]

BUSN 2103 – Business Communication

Business Communications is a survey course of communications skills in the business environment. Course content includes writing genres specific to business, delivering oral presentations, and developing interpersonal skills. Critical thinking and problem-solving skills are emphasized. Development of these skills is integrated with the use of technology. [ORANGE]

BUSN 2113 – Macroeconomics

(S) The functioning and current problems of the aggregate economy: determination and analysis of national income, employment, inflation and stabilization; money and banking, monetary and fiscal policy; and aspects of international interdependence. [ORANGE]

BUSN 2133 – Business Law

The course covers principles of business law and their application as they affect the average businessperson. Includes law and its administration, contract, principal and agents, negotiable instruments, principal and surety, insurer and insured. [ORANGE]

BUSN 2143 – Principles of Management

A study of the major approaches and techniques of management. Studies organizing, planning, staffing, directing, and controlling an organization. Also includes authority, responsibility, delegation, and assignment of activities to personnel. [ORANGE]

BUSN 2153 – Human Relations

A study of physiological, psychological, and social factors which affect human behavior. Personality traits, employer-employee relations, leadership qualities, and business ethics are emphasized. [ORANGE]

BUSN 2163 – Sports Management

An introduction to basic social, behavioral, and managerial skills necessary in the operation of sports organizations. Provides an overview of the sports industry, covering key areas including marketing, finance, law, and event management. [ORANGE]

BUSN 2203 – Principles of Advertising

A study of the various advertising media affecting society today and its evaluation. [ORANGE]

BUSN 2213 – Microeconomics

(S) Goals, incentives, and allocation of resources resulting from economic behavior with applications and illustrations from current issues: operation of markets for goods, services and factors of production; the behavior of firms and industries in different types of competition and income distribution. [ORANGE]

BUSN 2300 – Special Topics in Business Administration

The study and/or analysis of a selected topic in business. Individual and/or group study. May be repeated with a different topic. *Prerequisite: instructor consent.* [ORANGE]

BUSN 2400 – Internship in Business Administration

One to five hours credit for supervised internship in the field of business administration. *Prerequisite: division chair consent.* [ORANGE]

BUSN 2423 – Desktop Publishing

This course includes the production of documents commonly used in business and industry. Students will learn the production of business cards, letterheads, newsletters, calendars, pamphlets, and basic web page design. *Prerequisite: COMS 1133.* [GREEN]

BUSN 2433 – Fundamentals of Graphic Design

Introduces students to the core principles and elements of visual communication. Students will explore key design concepts such as color theory, typography, composition, and layout, while learning how to effectively use design software. [GREEN]

BUSN 2543 – Financial Accounting

Analyzes financial accounting, theory of debits and credits, financial statements, use of journals, sole proprietorships, and corporation. [ORANGE]

BUSN 2643 – Managerial Accounting

Includes managerial accounting, a study of managerial concepts and statements through differential analysis, budgeting, manufacturing accounting, profit reporting for management analysis. *Prerequisite: BUSN 2543.* [ORANGE]

BUSN 2713 – Principles of Marketing

Includes a survey of the field of distribution. Assesses the various corporate operations, chain stores and jobbers for effectiveness and profitability. [ORANGE]

BUSN 2723 – Sports Marketing

Cultivating a strategic mindset in sports marketing and exploring the dynamics of promoting and growing sports organizations. Analyzes market opportunities, fan engagement, brand development, sponsorships, and the overall business landscape within the sports industry. [ORANGE]

BUSN 2753 – Social Media Management

This course provides students with the knowledge and skills to effectively manage and grow social media presence for business, brands, or personal projects. The course covers key topics such as content creation, audience engagement, platform-specific strategies, analytics, and social media advertising. [GREEN]

CAREER AND TECHNICAL EDUCATION (CTED)

CTED 1103 – Classroom and Laboratory Management in Career and Technical Education

Different classroom and laboratory methods are covered for which a teacher may use to manage the classroom and/or laboratory environment and create an environment that is conducive to learning. Topics covered include the use of control theory, creating a positive learning environment, motivating students to learn, changing the behavior of students through the use of different teaching methods, teachers serving as counselors, developing effective consequential actions and discipline, and nonviolent-crisis intervention. [RED]

CTED 1113 – Techniques for Teaching Career and Technical Education

Techniques and methods used in teaching career & technical education in classes and laboratory environments at the secondary and post-secondary level. [RED]

CTED 1203 – Workshop for Beginning Career and Technical Education Teachers

Intensive study of methods of teaching, principles of learning, and evaluating procedures [RED]

CTED 1213 – Laboratory and Shop Safety

A study of safety performance and shop safety, including inspection, planning and maintenance of a shop laboratory and a school shop safety prevention program. [RED]

CTED 1313 – Adult Learners

Facilitating adult learning. Areas of concentration are motivation, adult learners' characteristics, cultural issues, styles and patterns. Special attention will be focused on the adult learners in occupational, correctional, basic adult education, community colleges, extensions and proprietary student learner's programs. Focused toward identification of learning styles, needs and how to match delivery techniques to learners needs. [RED]

CHEMISTRY (CHEM)

CHEM 1315 – General Chemistry I

(N, L) General Chemistry I is an algebra-based course. This course includes nomenclature, atomic and molecular structure, stoichiometry, bonding, states of matter, thermochemistry, acids and bases, and gas laws; with laboratory. *Prerequisite: College-level placement in reading, mathematics, and English or concurrently enrolled in co-requisite instruction.* [RED]

CHEM 1515 – General Chemistry II

(N, L) General Chemistry II is an algebra-based course. This course is a continuation of CH140 with emphasis on kinetics, equilibrium, thermodynamics, electrochemistry, qualitative analysis, organic chemistry, biochemistry, and nuclear chemistry; with laboratory. *Prerequisites: C or better in CHEM 1315 with a C or better in MATH 1473, 1513, or 1523.* [RED]

CHEM 2013 – Survey of Organic Chemistry

(N) . Brief Organic Chemistry, a one semester course in organic chemistry. This course includes general principles, methods of preparation, reactions, and uses of organic compounds. *Corequisite: C or better in CHEM 1515.* [RED]

CHEM 2300 – Special Topics in Chemistry

(N) The study and/or analysis of a selected topic in chemistry. Individual and/or group study. The course number may be repeated with a different topic. *Prerequisites: instructor consent.* [RED]

CHEROKEE (CHER)

CHER 1113 – Elementary Cherokee I

Development of listening, pronunciation, speaking skills, and socio- linguistics/culture of the Cherokees. [RED]

CHER 1123 – Elementary Cherokee II

Continuation of listening, pronunciation, speaking skills, and socio-linguistics/culture of the Cherokees. *Prerequisite: CHER 1113.* [RED]

CHILD DEVELOPMENT (CHDV)

CHDV 1113 – Professional Preparation I

An overview of all aspects of teaching young children, including child development, behavior and guidance, working with families, planning and implementing learning activities, professionalism and program management. This course also provides an overview of the early childhood profession and its multiple historical, philosophical, and social foundations as they relate to current thought and practice. (SP) *Prerequisite: CHDV 2523.* [RED]

CHDV 1323 – Health and Safety of Young Children

A course specifically designed to develop an understanding of the principles and practices for the health and safety of young children in group setting. Also includes the application of these principles and practices with young children in group care and the teaching of the practices to children. (SP) [RED]

CHDV 2223 – Creative Experiences for Young Children

This course is designed to provide an understanding of the principles and practices for the development of skills and techniques for working with children in creative arts which include art, music, and drama. (SP) [RED]

CHDV 2233 – Math, Science, and Social Studies

A study of the use and value of appropriate materials in the teaching of mathematics, science, and social studies to young children. (SP) [RED]

CHDV 2243 – Language and Literacy Development

This course focuses on language development in young children and appropriate experiences in the language arts that promote literacy. (SU) [RED]

CHDV 2300 – Special Topics in Child Development

The study and/or analysis of a selected topic in child development. Individual and/or group study. May be repeated with a different topic. *Prerequisite: instructor consent.* [RED]

CHDV 2400 – Internship in Child Development

One to five hours credit for supervised internship in the field of child development. *Prerequisite: division chair consent.* [RED]

CHDV 2433 – Professional Development

This field-based experience course will allow students to apply and demonstrate their knowledge of early care practice. This course will enhance student learning and ensure they are capable of functioning as competent members of an educational or childcare team. A professional Portfolio will be developed using NAEYC standards. Course is to be taken during the semester of graduation. Course also includes supervised observations. [RED]

CHDV 2440 – Child Development Externship

A lab practicum designed for those wishing to enter the field of early childhood education. *Prerequisite: instructor consent.* [RED]

CHDV 2523 – Child Growth and Development

This course will identify patterns of the physical, intellectual and emotional/psycho-social development of children from conception through middle childhood. The course will recognize the major theories of human development as they apply to children. [RED]

CHDV 2533 – Guidance of Young Children

This course presents the theoretical basis for the use of positive, constructive child guidance and discipline techniques in programs serving children. A general understanding of behavior patterns of children, methods of guidance and directing children's behavior, and activities for positive growth and development are included. (FA) [RED]

CHDV 2553 – Program Planning

This course is designed to apply the principles and techniques associated with curriculum content including room arrangements and scheduling activities for young children in a group setting. It includes guidelines for selection of materials, equipment, and methods of improvising activities with children. (FA) [RED]

CHDV 2563 – Child and Family in Society

A laboratory course to enable students to develop and demonstrate an understanding of the family in various cultural settings including the place of the child in the family as well as environmental factors. The development of referral methods for parents with special needs and participation in parent education activities. [RED]

CHDV 2573 – Children with Special Needs

The course focuses on children with special abilities and implementing practical strategies for inclusion. Recognition of a child's potential through the development of methods for working with individuals and families is emphasized. (FA) [RED]

CHDV 2583 – Supervisor Management

The course focuses on how to effectively manage childcare programs. Relevant and current issues in the field are addressed. Licensing requirements, managing staff, and ethical professional issues are studied. How to implement developmentally appropriate practices and how to create a positive and safe learning environment are included. [RED]

CHDV 2593 – Infant and Toddler Programs

This course covers the dynamics of infant and toddler development as related to group situations, curriculum decisions and program planning. Use of the ITERS rating scale and observation will be included. [RED]

CHDV 2623 – Marriage and Family Development

Building relationships, dating, engagement, and marriage in present day society. (SP) [RED]

CHDV 2633 – Infancy and Early Development

Study of prenatal development with emphasis on prenatal care, developmental stages, and behavior to age five. (SU) [RED]

CHDV 2653 – Parenting

This course explores parenting philosophies, styles and techniques as well as decisions, responsibilities and issues related to parent-child relationships. (SP) [RED]

COMPUTER INFORMATION SYSTEMS (COMS)

COMS 1003 – Computers 101

This is an introductory computer course, designed specifically for those students with little or no computer experience. COMS 1003 will provide students with an orientation to terminology, keyboarding techniques, hardware, software, and Internet skills. Students will also receive a basic introduction to the following applications: Word Processing, Spreadsheets, Presentation, and file management. This course will not substitute for COMS 1133 or other computer literacy requirements but is designed to prepare students for successful completion of the program required courses. [ORANGE]

COMS 1013 – HTML and CSS

This course presents the introduction of Hypertext Markup Language (HTML) and Cascading Style Sheets (CSS) which are presented with the introductory principles of website design. Projects will include the creation of a variety of different types of web pages and websites, advocating accessibility and efficiency principles and techniques. *Prerequisite: COMS 1133.* [ORANGE]

COMS 1133 – Fundamentals of Computer Usage

An introductory course providing an orientation to terminology, techniques, hardware, software, ethics and Internet skills. Students will learn to utilize the following applications: word-processing, spreadsheet, database, presentation, and file management systems. [ORANGE]

COMS 1203 – Introduction to Computer Programming

This course serves as an introduction to structured programming techniques and development practices. Concepts covered include principles of problem solving, debugging, sequence, selection, iteration, arrays, I/O, use of algorithms, flow charts, hierarchy charts, common language structures, and pseudocode. Topics will be applied using an appropriate programming language. *Prerequisite: COMS 1133.* [ORANGE]

COMS 1413 – Microcomputer Operating Systems

This is a support-oriented course providing students with information and hands-on classroom experience in dealing with operating system issues inherent to PC hardware and software installation, upgrade configuration, maintenance, and trouble shooting in a user-based computing environment. *Prerequisite: COMS 1133.* [ORANGE]

COMS 1483 – Introduction to UNIX (LINUX)

This course serves as an introduction to the UNIX operating system. Concepts covered include basic UNIX commands, compilers, editors, text processors, the UNIX file structure system organization, and basic system administration. *Prerequisite: COMS 1133 or division chair consent.* [ORANGE]

COMS 1503 – Programming in BASIC

An introductory course in procedural programming taught in the BASIC language. Students will learn to develop logic for

problem solving (basic control structures), as well as write, execute, and test programs. This course will include input/output, conditional statements, loops, subroutines, sequential file processing, single and multi-dimensional arrays and searching and sorting as well as other fundamental programming techniques. *Prerequisite: College-level placement in MATH or successful completion of MATH 0471, 0511, or 0521.* [ORANGE]

COMS 1533 – Spreadsheet Analysis

A course designed to teach the fundamentals of computer spreadsheets. An electronic spreadsheet is a table of rows and columns used to record transactions and manipulate numeric and text data. Hands-on experience is emphasized, using current spreadsheet software. *Prerequisite: COMS 1133.* [ORANGE]

COMS 1543 – Database Management

A course designed to teach database management techniques; a method designed to consolidate independent files into one integrated whole, so that the same data is accessible to many different users within the same organization. [ORANGE]

COMS 1793 – Mobile Development - iOS

This course provides hands-on introduction to designing, developing, debugging, and testing mobile applications using Objective C and targeting iPhone mobile devices. Among the topics to be covered: using Core Graphics and Core Animation to customize UI components, using the iPhone's built-in accelerometers, and integrating your application with other iPhone applications and services. *Prerequisite: COMS 1133 or division chair consent.* [ORANGE]

COMS 1823 – COBOL I

Fundamentals of the COBOL programming language, using hands-on, problem-solving techniques, including the development of programming principles using structured methods. Also includes the structured methods approach to the development of programming principles. [ORANGE]

COMS 2023 – A+ I

This course presents a balanced approach preparing individuals to support both new technologies and software, while also covering the work reality of system support technicians. Concepts covered include mobile devices, networking, hardware, virtualization, and cloud computing, plus network/hardware troubleshooting. This course provides thorough preparation for the content on the new CompTIA A+ Core 1 Certification exam. *Prerequisite: COMS 1133 or division chair consent.* [ORANGE]

COMS 2033 – JavaScript

This course introduces the fundamentals of the JavaScript programming language, enabling students to create interactive and dynamic web pages by manipulating HTML content and styling with CSS, covering core concepts like variables, data types, control structures, functions, objects, Document Object Model manipulation, event handling, and modern JavaScript features, allowing students to build dynamic and engaging web experience. *Prerequisite: COMS 1133 or division chair consent.* [ORANGE]

COMS 2143 – A+ II

This course prepares students to support both new technologies and software, while also covering the work reality of system support technicians. Concepts covered include installation/maintenance of operating systems, security, software trouble shooting, and operational procedures. This course provides thorough preparation for the content on the new CompTIA A+ Core 2 Certification. *Prerequisite: COMS 1133 or division chair consent.* [ORANGE]

COMS 2163 – Windows Operating Systems

This course provides a comprehensive understanding of various operating systems, covering their core functionalities, command line interfaces, file systems, user management, networking capabilities, scripting languages, and key differences between the platforms, enabling students to effectively administer and utilize them in various computing environments; with a focus on practical application through hands-on exercises and project-based learning. *Prerequisite: COMS 1133 or division chair consent.* [ORANGE]

COMS 2213 – Network Fundamentals

This course is an introduction in the network curriculum providing the basis of computer networking fundamentals. Concepts covered include network addressing, network services of connectivity, networking in the enterprise, network infrastructure exploration, switching in an enterprise network, routing with a distance vector protocol and/or a link-state protocol, filtering traffic using access control lists, plus communication protocols and standards. *Prerequisite: COMS 1133 or division chair consent.* [ORANGE]

COMS 2233 – Network Operating Systems I

The students will utilize a Microsoft Windows based operating system to create and to manage a local area network. Topics to be covered include creating and administering user and group accounts, managing network resources and administering permissions for files and folders, setting up and administering the printing environment, using the auditing functions, backing up and restoring files and folders. This course is designed to prepare students for the Microsoft Certified Professional examination. *Prerequisites: COMS 1413 and COMS 2213.* [ORANGE]

COMS 2243 – Network Operating Systems II

The students will utilize a Novell based operating system to create and to manage a local area network. Topics to be covered include creating and administering user and group accounts, managing network resources and administering permissions for files and folders, setting up and administering the printing environment, using the auditing functions, backing up and restoring files and folders. The course is designed to prepare students for the Certified Novell Administrator examination. *Prerequisites: COMS 1413 and COMS 2213.* [ORANGE]

COMS 2263 – Internet Foundations

Course objectives will include Internet basics, Internet clients, website development, networking, security, and business concepts. The course will provide baseline technical knowledge that would allow students to pursue a variety of Internet-related careers. This course is designed to prepare students for the Inet+ certification examination. *Prerequisite: COMS 2213.* [ORANGE]

COMS 2283 – Visual Basic

This course serves as the basis in providing building blocks of programming in Visual Basic. Concepts covered include learning how to write Windows applications and executing programs using the Visual Basic language, with hands-on problem-solving techniques using variables to store data, control structures, and loops. *Prerequisite: COMS 1133 or division chair consent.* [ORANGE]

COMS 2300 – Special Topics in Computer Information Systems

The study and/or analysis of a selected topic in computer information science. Individual and/or group study. May be repeated with a different topic. *Prerequisite: division chair consent.* [ORANGE]

COMS 2323 – Introduction to Java

This course serves as an introduction to provide the beginning programmer with experience in developing applications using the Java programming language. Concepts covered include content on modifying and creating simple Java programs, building blocks, operators, core APIs, methods, exceptions, and threads. *Prerequisite: COMS 2473 or COMS 2843 or division chair consent.* [ORANGE]

COMS 2463 – PHP Programming

This course serves as an introduction to PHP (Hypertext Preprocessor) which is a general purposes scripting language that can be used to develop dynamic and interactive websites. Concepts covered include using PHP in the design of web-based applications, arrays, strings, regular expressions, file I/O, email/database interfaces, stream/network programming,

debugging, and security. *Prerequisite: COMS 1133 or division chair consent.* [ORANGE]

COMS 2473 – C Language

This course serves as an introduction to the C programming language. The student will learn to write efficient, maintainable, and portable codes. Concepts covered include running a C program, functions, data types, I/O, character strings, arrays, operators and precedence, expressions, control statement, pointers, structures, recursion, and bit-operations. *Prerequisite: COMS 1133 or division chair consent.* [ORANGE]

COMS 2493 – Principles of Information Systems

This course serves as an introductory course exploring the fundamental concepts of how information technology (IT) is used within organizations to support business operations, including hardware, software, networks, big data, systems analysis, and project management with a focus on applying these principles to real-world business scenarios and processes; the course will also address ethical, and security considerations related to information systems. *Prerequisite: COMS 1133 or division chair consent.* [ORANGE]

COMS 2500 – Computer Internship

Each student will be placed in a practicum environment for utilizing computer skills, learning new skills, and becoming familiar with the workplace. The course is intended to provide the students with work experience. *Prerequisite: division chair consent.* [ORANGE]

COMS 2613 – C# Programming

This course serves as an introduction to the C# programming language. Concepts covered include using C# programming language for solving problems, data types, functions, syntax, control structures, object-oriented concepts, simple graphical displays, file I/O, and error handling. *Prerequisite: COMS 1133 or division chair consent.* [ORANGE]

COMS 2643 – Database and Design SQL

This course introduces students to the fundamental concepts of relational database management systems (RDBMS). The course focuses on the design principles and practical application of Structured Query Language (SQL) to create, manipulate, and retrieve data within a structured database environment, implementing solutions to business-related problems. [ORANGE] *Prerequisite: COMS 1133 or division chair consent.*

COMS 2683 – Data Structures

This course serves as an introduction of the applications commonly used in data structures and related algorithms for maintaining them. Concepts covered include algorithm complexity, sorting algorithms, lists, stacks, queues, search trees, heaps, graphs, and hashing as well as updated technologies. *Prerequisite: COMS 1133 or division chair consent.* [ORANGE]

COMS 2743 – Python

This course is an introduction to the Python programming language for students without prior programming experience. Concepts covered include data types, control flow, object-oriented programming, and graphical user interface-driven applications. *Prerequisite: COMS 1133 or division chair consent.* [ORANGE]

COMS 2783 – Advanced UNIX (LINUX)

This course serves as a continuation in the advanced study of the UNIX Operating System. Concepts covered include advanced studies of system administration management/functions, plus the installation and maintenance of software, network, and data integrity issues. *Prerequisite: COMS 1133 or division chair consent.* [ORANGE]

COMS 2793 – Mobile Development – Android

This course provides hands-on introduction to designing, developing, debugging, and testing mobile applications using Java and targeting Android-based mobile devices. Among the topics to be covered: taking advantage of Android's APIs for data storage, retrieval, user preferences, files, databases, ad content providers, and using Android's communication APIs for SMS, telephony, network management, and internet resources. **[ORANGE]**

COMS 2843 – C++ Language

This course prepares students to support technologies and software in programming techniques. Concepts covered include C++ basics, selection and repetition structures, arrays, functions, and object-oriented programming. *Prerequisite: COMS 2473 or division chair consent.* **[ORANGE]**

CRIMINAL JUSTICE (CJPS)

CJPS 1103 – Introduction to Corrections

An overview of the historical development and a complete analysis of the entire adult corrections systems. **[RED]**

CJPS 1303 – Introduction to Criminal Justice

(S) An overview of the criminal justice system, to include police, courts, and corrections as they pertain to both adults and juveniles. An understanding of the participants and their roles in accomplishing the missions of the criminal justice system. **(FA) [RED]**

CJPS 1143 – Introduction to Juvenile Justice and Delinquency

An overview of the organizing, function, and jurisdiction of the juvenile justice system; methods of handling, processing, and detention of juveniles; case disposition, court procedures, and sociological perspective. **[RED]**

CJPS 2013 – Criminal Law I

The basic concepts of the theory of substantive criminal law including sources, classification of crimes, anticipatory offenses, parties to crime, uncompleted crimes, criminal liability, and defenses. **(FA) [RED]**

CJPS 2023 – Criminal Law II

An examination of the nature of the criminal acts of substantive criminal law and defining the necessary elements and punishments of each act. **(SP) [RED]**

CJPS 2033 – Police Report Writing

The study of police report writing methods and the various types of reports required by law enforcement. **(SP) [RED]**

CJPS 2043 – Criminal Procedures

Rules, principles, and concepts governing the enforcement of arrest, search and seizure; primarily focusing on the 4th, 5th, and 6th amendments to the Constitution. **(FA) [RED]**

CJPS 2053 – Criminal Investigation

An introduction to the fundamentals of criminal investigation, including theory and history, conduct at crime scenes, collection, and preservation of evidence. **(SP) [RED]**

CJPS 2073 – Street Survival

The study of tactics for armed encounters. This course includes study of line of duty deaths of police officers, survival shooting techniques and methods of apprehending armed offenders. **(SP) [RED]**

CJPS 2090 – Internship in Criminal Justice

One to five hours' credit for supervised work in cooperating criminal justice agencies. For each three hours of supervised experience per week during a semester, one hour of credit may be earned (up to a maximum of five credit hours) as a practitioner within the criminal justice system. A student may also receive credit for work experience that is not an assignment that they would normally perform in the course of their present duties. *Prerequisite: division chair consent.* [RED]

CJPS 2300 – Special Topics in Criminal Justice

The study and/or analysis of a selected topic in Criminal Justice/Police Science. Individual and/or group study. May be repeated with a different topic. *Prerequisite: instructor consent.* [RED]

EDUCATION (EDUC)

EDUC 1111 – College Orientation

A consideration of academic, social, vocational, and other basic problems common to first-year college students. This course is not recommended if the student already has credit for EDUC 1113, Strategies for Success. [RED]

EDUC 1113 – Strategies for Success

This course is designed to assist students in obtaining personal and academic skills and knowledge necessary to reach their educational objectives. Topics to be covered include memory development, time management, test-taking, communication skills, career planning, study skills and techniques, wellness, an understanding of diversity and career issues that face many college students. This course is not recommended if the student already has credit for EDUC 1111, College Orientation. [RED]

EDUC 2300 – Special Topics in Education

The study and/or analysis of a selected topic in Education. Individual and/or group study. May be repeated with a different topic. *Prerequisite: instructor consent.* [RED]

EDUC 2311 – President's Leadership Class I

The President's Leadership Class offers transformative experiences in strategic leadership. Tailored for aspiring leaders seeking to enhance their capabilities, this course delves into the essential skills and mindset required for effective leadership. *(FA) Prerequisites: Freshman standing, successful application with interview, and instructor consent.* [RED]

EDUC 2321 – President's Leadership Class II

The President's Leadership Class offers transformative experiences in strategic leadership. Tailored for aspiring leaders seeking to enhance their capabilities, this course delves into the essential skills and mindset required for effective leadership. *(SP) Prerequisites: Freshman standing, successful application with interview, and instructor consent.* [RED]

EDUC 2331 – President's Leadership Class III

The President's Leadership Class offers transformative experiences in strategic leadership. Tailored for aspiring leaders seeking to enhance their capabilities, this course delves into the essential skills and mindset required for effective leadership. *(FA) Prerequisites: Sophomore standing, successful application with interview, and instructor consent.* [RED]

EDUC 2341 – President's Leadership Class IV

The President's Leadership Class offers transformative experiences in strategic leadership. Tailored for aspiring leaders seeking to enhance their capabilities, this course delves into the essential skills and mindset required for effective leadership. *(SP) Prerequisites: Sophomore standing, successful application with interview, and instructor consent.* [RED]

EDUC 2443 – Leadership Development

This course will examine all aspects of leadership development in the individual. Emphasis will be placed on the study of philosophy, morals, ethics, individual ability, and style of leadership. [RED]

ENGLISH (ENGL)

ENGL 0121 – Fundamentals of English/Reading Lab

This lab teaches skills in basic grammar, mechanics, and paragraph construction required for successful college writing while also enhancing reading proficiency. The lab is required of students not meeting appropriate placement measures and are enrolled in the companion ENGL 1113 course. ENGL 0121 credits do not count toward associate degrees [RED]

ENGL 1113 – English Composition I

This course provides an introduction to college-level writing. *Prerequisite: College-level placement in reading and English or concurrently enrolled in co-requisite instruction.* [RED]

ENGL 1213 – English Composition II

This course provides instruction in academic writing and research techniques and builds upon the skills developed in English Composition I. *Prerequisite: ENGL 1113.* [RED]

ENGL 2113 – Creative Writing I

This course provides an introduction to the techniques of creative writing. *Prerequisite: ENGL 1113.* [RED]

ENGL 2300 – Special Topics in English

The study and/or analysis of a selected topic in English. Individual and/or group study. May be repeated with a different topic. *Prerequisite: instructor consent.* [RED]

ENGL 2413 – Survey of World Literature I

(H) This course examines works of world literature, focusing on texts from the ancient world to the mid-17th century. This course is cross listed with HUMN 2413. *Prerequisite: ENGL 1113.* [RED]

ENGL 2443 – Survey of World Literature II

(H) This course examines works of world literature, focusing on texts written since the mid-17th century. This course is cross listed with HUMN 2443. *Prerequisite: ENGL 1113.* [RED]

ENGL 2543 – Survey of British Literature I

(H) This course examines works of British literature written prior to the nineteenth century. This course is cross listed with HUMN 2543. *Prerequisite: ENGL 1113.* [RED]

ENGL 2653 – Survey of British Literature II

(H) This course examines works of British literature written since the beginning of the nineteenth century. This course is cross listed with HUMN 2653. *Prerequisite: ENGL 1113.* [RED]

ENGL 2743 – Survey of Native American Literature

(H) This course provides an overview of Native American literary traditions. This course is cross listed with HUMN 2733. *Prerequisite: ENGL 1113.* [RED]

ENGL 2773 – Survey of American Literature I

(H) This course examines works of American literature written prior to the middle of the nineteenth century. This course is cross listed with HUMN 2773.. *Prerequisite: ENGL 1113.* [RED]

ENGL 2883 – Survey of American Literature II

(H) This course examines works of American literature written since the middle of the nineteenth century. This course is cross listed with HUMN 2883. *Prerequisite: ENGL 1113.* [RED]

ENGINEERING (ENGR)

ENGR 1111 – Introduction to Engineering

An introduction to the study and practice of engineering. Intended to develop skills for students interested in engineering including expected engineering student behavior. Development of tools needed by engineering students, and a discussion on the role of engineers in society. An introduction to engineering ethics including safety issues, and the relationship of engineering to social, global, and contemporary issues. [RED]

ENTOMOLOGY (ENTO)

ENTO 2003 – Insects and Society

(N) Influence of insects and related arthropods on human society. Current issues involving insects, society and the environment. View of insects in folklore and mythology. Basic biology and behavior of insects and use of insects as model systems for biological studies. A course for both majors and non-majors. [RED]

ENTO 2223 – Insects in Global Public Health

(N) Biology of diseases carried by arthropods, including their historical and societal impacts focusing on the intersection of arthropod and human biology. [RED]

ENTO 2993 – Introduction to Entomology

(N, L) Basic biology and classification of insects and closely related animals. Overview of the ecological roles of insects in both natural and managed ecosystems. [RED]

FAMILY AND CONSUMER SCIENCE EDUCATION (FCSE)

FCSE 1213 – Introduction to Nutrition

The consideration of basic nutrition related to food and health problems in the present socio-economic and cultural environment is included in this course. [RED]

FOOD SCIENCE (FDSC)

FDSC 1133 – Fundamentals of Food Science

Food industry from producer to consumer and the current U.S. and world food situations. [RED]

FDSC 2102 – Regional Diversity in Food Production, Selection, and Consumption

(D) Examines the diversity of people associated with food production, selection, and consumption in the United States. Evaluate the cultural diversity in food production workplace and economic and social factors that influence this diversity. Examine various food selection and consumption criteria of varying contemporary cultures based on economic, social, and religious considerations. [RED]

FDSC 2143 – Introduction to Food Industry Operations

Introduction to Food Industry basics: business planning, food safety regulations, labeling, UPCs, packaging, materials, patents, trademarks, processing, co-packing, and introduction to various food processing techniques. [RED]

FDSC 2231 – The Science of BBQ

Survey, demonstration and participation in preparation techniques of barbecue and the science of selection and preparation of meat for barbecue. Comparison of regional and international methods. [RED]

FDSC 2233 – The Meat We Eat

Overview of all animal, poultry, and fish protein sources used for human consumption, but focusing on red meat. Examination of each phase of production, inspection, safety, grading, processing, preparation, and current issues of the industries. Development of an understanding of the importance of meat in the diet and part of global agriculture. This course is cross listed with ANSI 2233. [RED]

FDSC 2253 – Meat Animal and Carcass Evaluation

Evaluation of carcasses and wholesale cuts of beef, pork, and lamb. Factors influencing grades, yields, and values in cattle, swine, and sheep. This course is cross listed with ANSI 2253. (SP) *Prerequisite: ANSI 1124.* [RED]

FDSC 2300 – Special Topics in Food Science

The study and/or analysis of a selected topic in Food Science. Individual and/or group study. May be repeated with a different topic. *Prerequisite: instructor consent.* [RED]

GENERAL PHYSICAL SCIENCE (GPS)

GPS 1101 – General Physical Science Laboratory

(L) The study of the physical laws of nature in the laboratory setting. Activities will enhance the concepts learned in GPS 1103, General Physical Science. *Corequisite: GPS 1103.* [RED]

GPS 1103 – General Physical Science

(N) A survey of the development and significance of laws physical science with consideration of topics from astronomy, geology, physics, chemistry, and meteorology. *Prerequisite: College-level placement in reading, mathematics, and English or concurrently enrolled in co-requisite instruction.* [RED]

GEOGRAPHY (GEOG)

GEOG 2243 – Introduction to Geography

A study of basic geographic concepts and global physical and cultural patterns. (FA) [RED]

GEOLOGY (GEOL)

GEOL 1114 – General Geology

(N, L) A study of the solid matter and history of the earth. Includes the study of topographic maps, rocks and minerals, and geological processes. Examples of topics covered are weathering, graduation by wind, running water, ground water, glaciers, wave and gravity, diastrophism, and volcanism. *Prerequisite: College-level placement in reading, mathematics, and English or concurrently enrolled in co-requisite instruction.* [RED]

HEALTH (HLTH)

HLTH 1113 – Personal Health

In this course, students will understand basic health and wellness concepts to lead a healthy lifestyle. They will be able to assess their own personal health, understand risky behaviors, and know the most prevalent diseases in the general population and contemporary findings related to health and wellness. [RED]

HLTH 1123 – First Aid/Responding to Emergencies

This course includes the discussion and practice of the emergency treatment of injuries and illness. Includes knowledge of self-help techniques and home care if medical assistance is not available. [RED]

HLTH 2300 – Special Topics in Health

The study and/or analysis of a selected topic in health. Individual and/or group study. *Prerequisite: instructor consent.*
[RED]

HLTH 2313 – Health of the School Child

A study of the primary areas of school health with particular emphasis on health services, health instruction and a healthy environment. [RED]

HLTH 2353 – Community Health

A study of institutions, agencies, and individuals and their interrelationships and practices in responding to the health problems of communities. The course is designed to create an awareness of current trends, basic issues, controversial issues, and fundamental principles in health promotion and health education. [RED]

HLTH 2383 – Care and Prevention of Athletic Injury

Introduction to the principles and techniques of preventing, treating and rehabilitating sports injuries. Includes therapeutic methods, mechanisms of injuries, and heat illness. Practical experience in the application of preventive taping and bandaging is also included. [RED]

HISTORY (HIST)

HIST 1113 – Oklahoma History

(S) A Survey of Oklahoma history pre-statehood to present. (FA) [RED]

HIST 1123 – Jewish History

Introduces students to both the basics of Jewish history and the different disciplinary inquiries into the Jewish experience. The course covers biblical, rabbinic, medieval and modern Jewries in the ways in the ancestral homeland (e.g. Israel) and in the diaspora (e.g. other lands in which Jews settled). [RED]

HIST 1223 – Early Western Civilization

(H, S) A survey of the history of Europe and the Middle East from Antiquity to the Medieval/Renaissance Era. [RED]

HIST 1323 – Modern Western Civilization

(H, S) A survey of the history of Europe and the Middle East from the Medieval/Renaissance Era to present. [RED]

HIST 1483 – American History Survey to 1877

A survey of American History to 1877. [RED]

HIST 1493 – American History Survey since 1877

A survey of American History since 1877. [RED]

HIST 2123 – Contemporary American Affairs

(S) A discussion and reading course devoted to the study of contemporary social, economic, and political problems. (SP)
[RED]

HIST 2223 – African American History

(S) An examination of the contributions made by Black Americans to the development of the United States. (FA) [RED]

HIST 2233 – The American South

(S) This course introduces students to major trends in the US South, covering economic, political, cultural, social, and historiographical trends that construct and alter the South as a region. [RED]

HIST 2300 – Special Topics in History

The study and/or analysis of a selected topic in History. Individual and/or group study. May be repeated with a different topic. *Prerequisite: instructor consent.* [RED]

HIST 2400 – Internship in History

One-to-five-hours credit for a supervised internship in the field of history. *Prerequisite: division chair consent.* [RED]

HIST 2423 – Native American History

(S) A survey of Indian Tribes from Pre-Columbian to the contemporary period. Emphasis on tribal cultures, impact with white civilization and U. S. Government relations. (SP) [RED]

HORTICULTURE (HORT)

HORT 1013 – Principles of Horticulture

(N, L) Basic physical and physiological processes responsible for plant dormancy, growth, flowering, fruiting, and senescence with respect to the science and art of production, cultivation, utilization, and/or storage of horticultural plants. Current research is associated with various horticultural commodity groups. [RED]

HORT 2101 – Landscaping with Native Materials

Identification, culture, installation, and maintenance of native plant materials for the home landscape. [RED]

HORT 2123 – Environmental Issues in Horticulture Science

(N) Impact of urban and suburban development on the environment and a study of horticultural solutions to limit or reverse environmental damage. Emphasis on horticultural design, construction, and maintenance techniques as they relate to the conservation of water, soil, native species, and ecosystems. [RED]

HORT 2201 – Maintaining the Home Landscape

Maintenance techniques in mowing, pruning, fertilizing, spraying pesticides, and mulching of plants in the home landscape. [RED]

HORT 2112 – Indoor Plants and Interior Plant Scaping

Identification, cultural requirements and use of ornamental foliage and flowering plants for indoor gardens. [RED]

HORT 2212 – Herbaceous Ornamental Plants

Identification, cultural requirements, and landscape value of ornamental flowering herbaceous plants. Discussions of design and installation of herbaceous beds and borders. [RED]

HORT 2300 – Special Topics in Horticulture

The study and/or analysis of a selected topic in Horticulture. Individual and/or group study. May be repeated with a different topic. *Prerequisite: instructor consent.* [RED]

HORT 2403 – Introduction to Turf Grass Management

This course focuses on the fundamentals of growing and managing turf grasses in a variety of settings. Students will learn about careers, plant varieties, tools, plant types, installation, basic care, pests, and diseases of regional turf grasses. (SP) [RED]

HORT 2402 – Residential Landscape Design

Identification and placement of plant materials and hard scape materials in a residential setting, including plant types, hard materials, structures, basic design, bed types, etc. [RED]

HORT 2412 – Horticulture Growing Systems

Identification, use and management of systems used for production, growth, and maintenance of plant materials, including greenhouse structure types, cold frames, hot beds, propagation chambers, hot boxes, raised beds, etc. [RED]

HORT 2513 – Herbaceous Plant Materials

Identification, cultural requirements and use of ornamental garden and indoor herbaceous plants. [RED]

HORT 2613 – Woody Plant Materials

Identification, cultural requirements, and use of ornamental woody plants including deciduous and evergreen trees, shrubs, and vines. [RED]

HORT 2653 – Beginning Floral Design

(H) Floral design history and scope. Design types and historical influence. Current Trends. Fundamentals of floral arrangement and design with hands on experience to learn the basic skills necessary for designing and arranging fresh flowers and dried materials for use in a home or retail shop. Plant and Flower Identification. Skills useful to flower shop employment are emphasized. Mechanics of design. [RED]

HUMANITIES (HUMN)

HUMN 1113 – Art Appreciation

(H) The study of art from a variety of different backgrounds and cultures as both product and process. Aesthetic judgment making in evaluation of art from different times and places is stressed. [RED]

HUMN 1123 – Music Appreciation

(H) Designed for the non-music major. Credit is not applicable to a music degree. A course in the exploration of music, covering important musical styles. [RED]

HUMN 2113 – General Humanities I

(H) A multidisciplinary study of humanities from ancient times through the Medieval Era. [RED]

HUMN 2223 – General Humanities II

(H) A multidisciplinary study of humanities from the Early Modern Period to the present. [RED]

HUMN 2300 – Special Topics in Humanities

(H) The study and/or analysis of a selected topic in Humanities. Individual and/or group study. May be repeated with a different topic. *Prerequisite: instructor consent.* [RED]

HUMN 2413 – Survey of World Literature I

(H) This course examines works of world literature, focusing on texts from the ancient world to the mid-17th century. This course is cross listed with ENGL 2413.. *Prerequisite: ENGL 1113.* [RED]

HUMN 2443 – Survey of World Literature II

(H) This course examines works of world literature, focusing on texts written since the mid-17th century. This course is cross listed with ENGL 2443. *Prerequisite: ENGL 1113.* [RED]

HUMN 2543 – Survey of British Literature I

(H) This course examines works of British literature written prior to the nineteenth century. This course is cross listed with ENGL 2543. *ENGL 1113.* [RED]

HUMN 2653 – Survey of British Literature II

(H) This course examines works of British literature written since the beginning of the nineteenth century. This course is cross listed with ENGL 2653. *Prerequisite: ENGL 1113.* [RED]

HUMN 2743 – Survey of Native American Literature

(H) This course provides an overview of Native American literary traditions. This course is cross listed with ENGL 2743.

Prerequisite: ENGL 1113. [RED]

HUMN 2773 – Survey of American Literature I

(H) This course examines works of American literature written prior to the middle of the nineteenth century. This course is cross listed with ENGL 2773. *Prerequisite: ENGL 1113. [RED]*

HUMN 2883 – Survey of American Literature II

(H) This course examines works of American literature written since the middle of the nineteenth century. This course is cross listed with ENGL 2883. *Prerequisite: ENGL 1113. [RED]*

MATHEMATICS (MATH)

MATH 0471 – Applied Mathematics Corequisite

The purpose of this course is to provide extra help and resources, in a structured setting, to students with a deficiency in concepts required for MATH 1473, Applied Mathematics. The lab is required of students not meeting appropriate placement measures and are enrolled in the companion MATH 1473 course. MATH 0471 credits do not count toward Associate Degrees. [RED]

MATH 0511 – PreCalculus Algebra Corequisite

The purpose of this course is to provide extra help and resources, in a structured setting, to students with a deficiency in concepts required for MATH 1513, PreCalculus Algebra. The lab is required of students not meeting appropriate placement measures and are enrolled in the companion MATH 1513 course. MATH 0511 credits do not count toward Associate Degrees. [RED]

MATH 0521 – Modeling and Functions Corequisite

The purpose of this course is to provide extra help and resources, in a structured setting, to students with a deficiency in concepts required for MATH 1523, Modeling and Functions. The lab is required of students not meeting appropriate placement measures and are enrolled in the companion MATH 1523 course. MATH 0521 credits do not count toward Associate Degrees. [RED]

MATH 1473 – Applied Mathematics

(A) Exploration of various topics designed to give the student an appreciation of mathematics and to expose the student to mathematical problems within numerous disciplines. Not intended for students majoring in science, mathematics, computer science, and business. *Prerequisite: College-level placement in mathematics or concurrently enrolled in co-requisite instruction. [RED]*

MATH 1493 – Mathematical Structures

(A) A study of the fundamental structures of mathematics. This course is suitable for prospective elementary school teachers. Topics include systematic problem solving, logic, techniques of reasoning and proof, finite algebras and their properties, structure of number systems, algebraic systems, and introduction to number theory. *Prerequisite: College-level MATH course or college-level placement in mathematics. [RED]*

MATH 1513 – PreCalculus Algebra

(A) Study of equations and functions (polynomial, rational, radical, exponential, logarithmic), systems of equations, and elementary sequences and series. Suitable for students planning on taking calculus. *Prerequisite: College-level placement in mathematics or concurrently enrolled in co-requisite instruction. [RED]*

MATH 1523 – Modeling and Functions

(A) Study of equations and functions (linear, polynomial, rational, exponential, logarithmic) from various perspectives (symbolic, verbal, numerical, graphical); digital techniques for graphing functions, solving equations, and modeling data using regressions. This course is designed for students in agricultural, business, life/health science, or social science majors. *Prerequisite: College-level placement in mathematics or concurrently enrolled in co-requisite instruction.* [RED]

MATH 1613 – Plane Trigonometry

(A) Study of trigonometric functions and their inverses, trigonometric identities, solutions of triangles, and applications. Suitable for students planning on taking calculus. *Prerequisite: C or better in MATH 1513.* [RED]

MATH 1715 – College Algebra and Trigonometry

(A) Graphing calculator required. Topics include linear and quadratic equations and inequalities, functions and graphs, polynomials and rational functions, exponential and logarithmic functions, systems of equations, matrices and determinants, trigonometric functions, equations, identities, solution of triangles and applications to physical science and trigonometric representations of complex numbers. *Prerequisite: college-level placement in mathematics.* [RED]

MATH 2113 – Modeling: Geometry and Measurement

(A) Introduction to geometric notation, and the study of constructions, measurements, similarity, congruence, translations, rotations, and reflections. Intended for elementary education majors. **(SP)** *Prerequisite: C or better in MATH 1493 or college-level mathematics.* [RED]

MATH 2214 – Calculus I

(A) Graphing calculator required. Topics include functions, limits, derivatives, applications of the derivative, the definite integral, the fundamental theorem of calculus and applications of integration. **(FA)** *Prerequisite: C or better in MATH 1613 or C or better in MATH 1715.* [RED]

MATH 2234 – Calculus II

(A) Graphing calculator required. Topics include inverse functions, logarithm and exponential functions, hyperbolic functions, techniques of integration, improper integrals, L'Hospital's rule and infinite series. **(SP)** *Prerequisite: C or better in MATH 2214.* [RED]

MATH 2300 – Special Topics in Mathematics

The study and/or analysis of a selected topic in mathematics. May involve individual and/or group study. This course may be repeated with a different topic. *Prerequisite: instructor consent.* [RED]

NATURAL RESOURCE ECOLOGY AND MANAGEMENT (NREM)

NREM 1012 – Introduction to Natural Resource and Management

Introduction to the wide variety of natural resources found globally with a focus on Oklahoma eco regions. Including an overview of the ecology and management of natural resources in the Pine Hardwood Forest, the Cross Timbers, and the tall grass, mixed grass, and short grass prairies. **(FA)** [RED]

NREM 1014 – Introduction to Natural History

(N, L) The study of living organisms, especially their origins, life histories, behaviors, conservation, and unique adaptations for reproducing and relating to their environment, Laboratory emphasis is on observation and investigation of the diversity and adaptations of living organisms. **(FA)** [RED]

NREM 1112 – Introduction to Archery

Proper operation of select types of bows; intro to Management of Competitive events; Competitive Archery skills, and Maintenance of Archery Range. Intro to Mental management and NTS Shot cycle. Introduction to safety and safety concerns. *Prerequisite: instructor consent.* **(FA)** [RED]

NREM 1113 – Elements of Forestry

Survey of forestry as an art, science and profession including forestry and natural resource management theory, forest distribution and ownership, history of forest resource policy development, forest protection, wildlife interactions, forest ecosystem process, current issues, and career opportunities. [RED]

NREM 1213 – Elements of Environmental Science

Application of biology, chemistry, ecology, economics, geology, hydrology, mathematics, physics, and other agricultural sciences to environmental issues. Addressing environmental problems from the standpoint of ethics, risk, and scientific and social feasibility. Emphasis on agricultural systems and natural resources. [RED]

NREM 2013 – Ecology of Natural Resources

Introductory focus on understanding and applying general ecological principles to agricultural and natural ecosystems. Emphasis on relationships between climate, soils, agricultural and natural ecosystems. Topics include nutrient cycles, energy flow, species interaction, biological diversity, productivity, sustainability and landscape and ecosystem management. (SP) *Prerequisite: BIOL 1114 or AGRO 1213.* [RED]

NREM 2112 – Advanced Archery

Advanced Skills in Safety Education; Proper operation of all types of bows; Management of Competitive events (i.e. indoor target and outdoor 3D); Competitive Archery skills, shooting processes and mental management. Maintenance of Archery Range and bows, working knowledge of NTS Shooting Process and Mental Management 'Software.' Students will demonstrate consistent and efficient execution and knowledge of NTS shooting process and mental management. Gain experience in sport archery contests. Use Archery Lab to modify, tune, and maintenance bows. Learn basic knowledge of Archery Analysis (i.e. oscillation velocity). *Prerequisite: instructor consent.* (SP) [RED]

NREM 2134 – Dendrology

Identification, taxonomy and distribution of forest trees and shrubs of the United States; their environmental requirements and utilization. [RED]

NREM 2300 – Special Topics in Natural Resource Ecology and Management

The study and/or analysis of a selected topic in Natural Resource Ecology and Management. Individual and/or group study. May be repeated with a different topic. *Prerequisite: instructor consent.* [RED]

NREM 2412 – Shotgun Safety and Shooting Sports

Safety Skills; Proper operation of firearms; Cleaning and anatomy of firearms; Proper disassembly; Skeet and Trap Shooting; Maintenance of target throwers; Shell reload; Shooting skills and techniques; Competitive shooting. (FA) *Prerequisite: instructor consent.* [RED]

NREM 2422 – Advanced Gun Safety and Shooting

Advanced Skills in Safety Education; Proper operation of firearms; Management of Competitive events; Advanced Competitive shooting skills. Maintenance of shooting range. (SP) *Prerequisite: instructor consent.* [RED]

NURSING (NURS)

NURS 1002 – Success in Nursing Education

This course has been designed to promote success in the nursing program. Students will be assisted in evaluating their own learning styles and discovering their most effective study methods. An explanation of cognitive levels of test questions is included, emphasizing application-style questions found in nursing course exams and the national licensure exam. Critical thinking exercises will be integrated throughout the course. Experience using nursing informatics and time management skills will further enhance the student's probability of success in the nursing program. [RED]

NURS 1003 – Medical Terminology

Introduction to word parts; root words, prefixes, and suffixes; structures, pathology, and procedures of body systems; diagnostic procedures; and pharmacology. [RED]

NURS 1112 – Lab and Diagnostics

Introduction to names of diagnostic and laboratory tests and their normal findings, critical values, indications for testing, test explanations, contraindications, potential complications, interfering factors, test results, and clinical significance. Emphasis on the role of nurses and other health care providers in diagnostic and laboratory testing is done by addressing psychosocial and physiologic interventions. [RED]

NURS 1113 – Study of Disease and Disorders

This course provides an introduction to acute, chronic, and contemporary diseases. Included are the etiology, pathophysiology, prevention, treatment, and control of selected diseases. Students will survey various disease states that occur across the lifespan. [RED]

NURS 1117 – Foundations in Nursing

For Nursing Program students only. This course introduces the student to the roles of the nurse as a provider of care, a manager of care, and a member of the nursing discipline. Course content contains an overview of clinical judgement, critical thinking, and the nursing process presented as a method for planning patient care throughout the life span. Emphasis is on establishing nurse/patient relationships and therapeutic communication. Skills associated with the nurse's role are the primary focus, including mathematical skills essential for calculating medication dosages. ***Prerequisite: Acceptance to the Connors State College Nursing Program. Corequisite: NURS 1143.*** [RED]

NURS 1133 – Mathematics for Nurses

For Nursing Program students only. Math for Nurses is designed to introduce the nursing major to the mathematical skills essential for calculating medication dosages. Content includes conversion between metric and household systems of measurement; calculation of oral and parenteral dosages; intravenous flow rate calculations; pediatric calculations; and critical care calculations. ***Prerequisite: Acceptance to the Connors State College Nursing Program. Corequisite: NURS 2223.*** [RED]

NURS 1143 – Foundations in Nursing Clinical

For Nursing Program students only. Clinical and simulation lab experience allows students to apply clinical judgement, critical thinking, and the nursing process in caring for patients and families. Emphasis is on establishing nurse/patient relationships, therapeutic communications, and skills associated with the nurse's role. ***Prerequisite: Acceptance to the Connors State College Nursing Program. Corequisite: NURS 1117.*** [RED]

NURS 1223 – Maternal and Pediatric Nursing Clinical

For Nursing Program students only. Clinical and simulation lab experience allows students to apply clinical judgement, critical thinking, and the nursing process in caring for patients and families experiencing childrearing, childbearing and selected medical-surgical problems. ***Corequisite: NURS 1227.*** [RED]

NURS 1227 – Maternal and Pediatric Nursing

For Nursing Program students only. Students will acquire knowledge of clinical judgment, critical thinking, and the nursing process in safe nursing care for families experiencing childbearing, childrearing, and selected medical/surgical problems. The focus will be on meeting basic needs and applying developmental theory. Expanded emphasis is on the role of the student as a member of the profession through recognition of accountability for nursing practice and identification of the need for personal and professional development. ***Prerequisite: C or better in NURS 1117 and P in NURS 1143. Corequisite: NURS 1223.*** [RED]

NURS 1232 – Pharmacology

For Nursing Program students only. Basic concepts and principles of pharmacology and terminology used in pharmacology as related to the nurse's role. Included will be sources of drug manufacturing, introduction to drug classifications, and the use of drugs in the health status of individuals throughout the life span. Other related concepts will include legal and ethical responsibilities and considerations, and utilization of the nursing process when administering medications therapy. Pharmacology is also integrated throughout the nursing curriculum. [RED]

NURS 2133 – Psychiatric and Medical-Surgical Nursing Clinical

For Nursing Program students only. Clinical and simulation lab experience allows students to apply clinical judgement, critical thinking, and the nursing process in caring for patients with acute and chronic illnesses in psychiatric and medical-surgical clinical settings. **Corequisite: NURS 2137.** [RED]

NURS 2137 – Psychiatric and Medical-Surgical Nursing

For Nursing Program students only. By amplifying the application of clinical judgement, critical thinking, and the nursing process, the student will utilize theoretical knowledge and clinical skills to meet the physical, psycho-educational, social, spiritual, and cultural needs of individual adults experiencing psychiatric disorders and medical-surgical conditions. Expanded assessment and the student's ability to function more independently when providing patient care within an interdisciplinary framework are emphasized. Professional growth and personal accountability are stressed throughout the course. **Prerequisite: C or better in NURS 1227 and P in NURS 1223 OR C or better in NURS 1133 and NURS 2223.** **Corequisite: NURS 2133.** [RED]

NURS 2223 – Transitions to Professional Nursing

For Nursing Program students only. This course provides career mobility for the eligible Licensed Practical Nurse and/or Paramedic. The course emphasizes clinical judgement, critical thinking, and the nursing process for the Career Ladder student. Professional nursing skills develop through an emphasis on communication, the role of the professional nurse, legal accountability, nursing ethics, and role change. The course's content also introduces the nursing major to the mathematical skills essential for calculating safe medication dosages. **Prerequisite: Acceptance to the Connors State College Nursing Program's Career Ladder Option.** [RED]

NURS 2243 – Critical Care Nursing and Leadership Development Clinical

For Nursing Program students only. Clinical and simulation lab experience allows students to apply clinical judgement, critical thinking, and the nursing process in caring for adult patients in complex settings. Selected clinical laboratory experiences allow management to apply concepts, principles, and skills acquired in previous theory classes. **Corequisite: NURS 2247.** [RED]

NURS 2247 – Critical Care Nursing and Leadership Development

For Nursing Program students only. This course focuses on providing advanced care for adult patients in complex settings. The student will demonstrate an internalization of the nursing process in coordinating care for individuals and groups of patients. In the roles of provider and manager of care, the students will practice accountability for their nursing judgments and actions. **Prerequisite: C or better in NURS 2137 and P in NURS 2133** **Corequisites: NURS 2243 and NURS 2252.** [RED]

NURS 2252 – Trends and Issues in Nursing

For Nursing Program students only. The student will use the nursing process to analyze current trends and issues influencing nursing. The course will examine the impact of social and scientific changes in the nursing profession, discuss ethical and legal issues, analyze concepts common to effective leadership and management, and explore the status of nursing research in seminar format. **Prerequisite: C or better in NURS 2137 and P in NURS 2133** **Corequisites: NURS 2243 and NURS 2247.** [RED]

OCCUPATIONAL THERAPY ASSISTANT (OTAT)

OTAT 1012 – Introduction to Occupational Therapy with Lab

This course establishes a knowledge base for the OTA student, emphasizing the human element of health care and the role of the occupational therapy assistant in providing this component. The history and philosophy of occupational therapy, the official framework documents of OT, and the use of research in treatment planning is introduced. OT methods and clinical applications and the OTA's role in various traditional and non-traditional settings across the lifespan will be explored to lay a foundation for the following program coursework. [RED]

OTAT 1022 – Kinesiology for OTA with Lab

This course builds on basic anatomic and physiologic concepts of human movement, emphasizing the kinesiological, anatomic, and functional aspects of the skeletal musculature of the human body and their application to human motion. [RED]

OTAT 1101 – Therapeutic Media

The purpose of this course is to acquaint the student with basic craft techniques utilized in treatment settings. Analysis of the therapeutic process and properties of hands-on activities will be explored as applied to a variety of populations, introducing concepts of adaptation to meet clients' needs. [RED]

OTAT 2002 – Health Care Systems and Occupational Therapy Management

In this course the OTA student employs knowledge of the past, present, and future trends of health care to explore various OT management styles, techniques, and applications. Proper documentation, methods, and reasoning for quality OT service delivery will be covered along with fiscal management and marketing of OT in multiple practice settings. [RED]

OTAT 2021 – Fieldwork I-A

This fieldwork experience will introduce the student to occupational therapy and related services in clinical locations such as hospitals, long-term care facilities, outpatient clinics, and psychosocial settings. Students will gain a better understanding of OT and how it fits in with other related services such as physical and speech therapy. Developing skills in professionalism, observation, and documentation will be emphasized during this fieldwork. [RED]

OTAT 2102 – Therapeutic Activities with Lab

In this course the OTA student learns how to use activities to promote wellness, health, and independence and the idea of therapeutic use of self is introduced. Activity analysis as a part of the assessment and intervention planning process will be learned. The student will become acquainted with using and adapting activities, games, and everyday skills, including the use of assistive technology and devices, to assist clients with a variety of life activities. [RED]

OTAT 2121 – Fieldwork 1-B

In this course students will apply OT concepts and techniques, learned during academic preparation, to practical situations. Students will work with fieldwork educators, patients/clients, and team members in a variety of practice settings such as schools, pediatric clinics, and community facilities. Written documentation, professionalism in treatment settings, and application of therapy techniques will be emphasized during this fieldwork. [RED]

OTAT 2133 – Pediatric Care in Occupational Therapy with Lab

This fieldwork experience will introduce the student to occupational therapy and related services in clinical locations such as hospitals, long-term care facilities, outpatient clinics, and psychosocial settings. Students will gain a better understanding of OT and how it fits in with other related services such as physical and speech therapy. Developing skills in professionalism, observation, and documentation will be emphasized during this fieldwork. [RED]

OTAT 2143 – Elder Care in Occupational Therapy

This course includes a comprehensive review of the aging process, integrating the complex and unique psychosocial and physical challenges of older adults. The concepts of aging, wellness, and participation in occupations in later life will be emphasized. Addressing both well elders and those with illness or injuries, the student will learn to use various intervention techniques in multiple practice settings. [RED]

OTAT 2152 – Psychosocial Dysfunction and Treatment Techniques

This course includes the principles and techniques of assessment and OT intervention strategies for individuals with emotional, cognitive, and psychosocial challenges. The psychosocial foundations of occupational therapy and the psychological and behavioral aspects of occupational performance are introduced for work with individuals and groups in a variety of traditional and non-traditional psychosocial settings. [RED]

OTAT 2212 – Disease Pathology

In this course OT students become familiar with the various mental and physical health conditions commonly encountered in occupational therapy practice. This course will introduce the etiology, prognoses, symptoms, and occupational performance effects of these health conditions. [RED]

OTAT 2206 – Fieldwork II-A

This fieldwork experience enables the student to apply knowledge and skills learned in the classroom to clinical situations, focusing on OT across the lifespan in various settings. Students will collaborate with faculty, fieldwork educators, patients/clients, and team members to develop the skills needed to enter OT practice. NOTE: All ACOTE “B” content standards are required to be complete in coursework prior to students going out on Level II fieldwork. [RED]

OTAT 2216 – Fieldwork II-B

In this fieldwork experience the student continues to synthesize the knowledge and skills learned in the classroom by applying these skills to practical situations. Students will be assigned to various clinical settings in the surrounding communities and will collaborate with faculty, fieldwork educators, patients/clients, and team members. This fieldwork course will prepare the student for entry-level competence as an occupational therapy assistant. NOTE: All ACOTE “B” content standards are required to be complete in coursework prior to students going out on Level II fieldwork. [RED]

PHYSICAL EDUCATION (PHED)

PHED 1411 – Varsity Athletics and Fitness

Criterion is the ability to perform in a fashion and level conducive to the nature of sport. Requires participation in the fitness program. This course is graded Pass and No Pass (P and NP). Grades are GPA neutral and do not count toward graduation. (FA) *Prerequisites: Freshman standing, successful team tryout, and instructor consent.* [RED]

PHED 1421 – Varsity Athletics and Fitness

Criterion is the ability to perform in a fashion and level conducive to the nature of sport. Requires participation in the fitness program. This course is graded Pass and No Pass (P and NP). Grades are GPA neutral and do not count toward graduation. (SP) *Prerequisites: Freshman standing, successful team tryout, and instructor consent.* [RED]

PHED 1711 – Dance Team

Criterion is the ability to perform in a fashion and level conducive to the nature of sport. Requires participation in the fitness program. This course is graded Pass and No Pass (P and NP). Grades are GPA neutral and do not count toward graduation. (FA) *Prerequisites: Freshman standing, successful team tryout, and instructor consent.* [RED]

PHED 1713 – Introduction to Athletic Training

An introduction to the profession of athletic training. Basic history, policies and procedures, management, and prevention techniques related to athletic training. Development of essential skills and competencies needed to perform selected athletic training procedures. Included lab portion for development of skills. (FA) [RED]

PHED 1721 – Dance Team

Criterion is the ability to perform in a fashion and level conducive to the nature of sport. Requires participation in the fitness program. This course is graded Pass and No Pass (P and NP). Grades are GPA neutral and do not count toward graduation. **(SP) Prerequisites: Freshman standing, successful team tryout, and instructor consent. [RED]**

PHED 1811 – Freshman Cheerleading

This course offers general improvement and fitness through development of skill. The emphasis will be on muscular development and acute coordination of the body. This course includes tri-weekly workouts on the universal weight machine. The seven remaining hours of this lab will be utilized for developing coordination for cheers, jumps and double stunts to be executed at the basketball games. This course is graded Pass and No Pass (P and NP). These grades are GPA neutral, and credit does not count toward graduation. **(FA) Prerequisites: Freshman standing, successful team tryout, and instructor consent. [RED]**

PHED 1813 – Sports Nutrition

Overview of the science of sports nutrition, with emphasis on nutrition as it applies to fitness, sport-specific training, and athletic performance. Topics include nutrient requirements and dietary recommendations, energy metabolism, weight management, and special nutrient needs during training and competition. **(FA) [RED]**

PHED 1821 – Freshman Cheerleading

This course offers general improvement and fitness through development of skill. The emphasis will be on muscular development and acute coordination of the body. This course includes tri-weekly workouts on the universal weight machine. The seven remaining hours of this lab will be utilized for developing coordination for cheers, jumps and double stunts to be executed at the basketball games. This course is graded Pass and No Pass (P and NP). These grades are GPA neutral, and credit does not count toward graduation. **(SP) Prerequisites: Freshman standing, successful team tryout, and instructor consent. [RED]**

PHED 2133 – Foundations of Physical Education

Designed for professional orientation in health and physical education. Includes a brief history, philosophy and modern trends in physical education, teacher qualification and vocational opportunities. **[RED]**

PHED 2142 – Theory of Coaching Baseball

The philosophy of coaching with emphasis on fundamentals, individual offense, defense, and game strategy. The history, techniques, styles of play, strategy and rules of baseball are included in this course. **[RED]**

PHED 2152 – Theory of Coaching Basketball

The philosophy of coaching with emphasis on fundamentals, individual offense, defense, and game strategy. The history, techniques, styles of play, strategy and rules of basketball are included in this course. **[RED]**

PHED 2162 – Theory of Coaching Cheerleading

Theory of Coaching Cheerleading is the study of teaching and coaching the basic fundamentals of Cheerleading. The history, techniques, strategy and rules of cheerleading are included in this course. **[RED]**

PHED 2222 – Introduction to Kinesiology

An introduction course to the discipline of Kinesiology. The course will include origin, scope, development, and purpose of the Kinesiology discipline. The course will provide knowledge concerning future directions and career possibilities. **(SP) [RED]**

PHED 2223 – Legal Aspects of Sports

Includes an examination of the interrelationships of the legal process in the field of physical education and athletics, discussion of fundamental legal concepts, analysis of litigated cases of tort-law, negligence. Also includes the liability of coaches and physical education instructors. **[RED]**

PHED 2300 – Special Topics in Physical Education

The study and/or analysis of a selected topic in Physical Education. Individual and/or group study. May be repeated with a different topic. *Prerequisite: instructor consent.* [RED]

PHED 2411 – Varsity Athletics and Fitness

Criterion is the ability to perform in a fashion and level conducive to the nature of sport. Requires participation in the fitness program. This course is graded Pass and No Pass (P and NP). Grades are GPA neutral and do not count toward graduation. (FA) *Prerequisites: Sophomore standing, successful team tryout, and instructor consent.* [RED]

PHED 2421 – Varsity Athletics and Fitness

Criterion is the ability to perform in a fashion and level conducive to the nature of sport. Requires participation in the fitness program. This course is graded Pass and No Pass (P and NP). Grades are GPA neutral and do not count toward graduation. (SP) *Prerequisites: Sophomore standing, successful team tryout, and instructor consent.* [RED]

PHED 2512 – Motor Learning

This course covers the concepts and applications of motor skill development dealing with attention, memory, knowledge of results, transfer, practice, and motivation. [RED]

PHED 2562 – Sports Officiating

A study of the rules, mechanics, and principles of officiating for basketball, baseball, and softball. Designed for students who desire to officiate interschool athletics. [RED]

PHED 2664 – Assessment and Management of Musculoskeletal Injuries

Recognition and management of medical conditions affecting athletic participants. Medical history, use of evaluative tools, knowledge of various conditions and diseases, and clinical evaluation techniques for musculoskeletal disorders. This course will correspond directly with clinical observation placement and skills will be evaluated under the supervision of ATC. (SP) *Prerequisites: PHED 1713 and HLTH 2383.* [RED]

PHED 2711 – Dance Team

Criterion is the ability to perform in a fashion and level conducive to the nature of sport. Requires participation in the fitness program. This course is graded Pass and No Pass (P and NP). Grades are GPA neutral and do not count toward graduation. (FA) *Prerequisites: Sophomore standing, successful team tryout, and instructor consent.* [RED]

PHED 2721 – Dance Team

Criterion is the ability to perform in a fashion and level conducive to the nature of sport. Requires participation in the fitness program. This course is graded Pass and No Pass (P and NP). Grades are GPA neutral and do not count toward graduation. (SP) *Prerequisites: Sophomore standing, successful team tryout, and instructor consent.* [RED]

PHED 2811 – Cheerleading

This course offers general improvement and fitness through development of skill. The emphasis will be on muscular development and acute coordination of the body. This course includes tri-weekly workouts on the universal weight machine. The seven remaining hours of this lab will be utilized for developing coordination for cheers, jumps and double stunts to be executed at the basketball games. This course is graded Pass and No Pass (P and NP). These grades are GPA neutral, and credit does not count toward graduation. (FA) *Prerequisites: Sophomore standing, successful team tryout, and instructor consent.* [RED]

PHED 2821 –Cheerleading

This course offers general improvement and fitness through development of skill. The emphasis will be on muscular development and acute coordination of the body. This course includes tri-weekly workouts on the universal weight machine. The seven remaining hours of this lab will be utilized for developing coordination for cheers, jumps and double stunts to be executed at the basketball games. This course is graded Pass and No Pass (P and NP). These grades are GPA neutral, and credit does not count toward graduation. *(SP) Prerequisites: Sophomore standing, successful team tryout, and instructor consent.* [RED]

PHYSICAL THERAPIST ASSISTANT (PTAT)

PTAT 1011 – Introduction to Physical Therapy

This course will introduce students to the profession and practice of Physical Therapy, including history, professional organizations, educational process, roles and relationship of the physical therapist and physical therapist assistant, contemporary practice settings in physical therapy, ethical behavior, fraud/abuse, professional behaviors, data collection and medical record keeping, communication with medical professionals and patients, evidence-based practice, medical literature review, cultural awareness in practice, and responsibility for professional development.

PTAT 1012 – Kinesiology for PTAs

The student will discuss the components of the musculoskeletal system, view function and mobility through the framework of the Human Movement System, and identify joint kinematics, normal and abnormal joint postures at rest and with activity, and normal and abnormal muscle tone. The student will become competent with joint range of motion assessment, manual muscle testing, and sensation testing. Clinical skills will be practiced in the lab.

PTAT 1023 – Physical Agents

During this course, the student will become competent in the application of the following biophysical agents: biofeedback, electrotherapeutic agents, compression therapies, cryotherapy, hydrotherapy, superficial and deep thermal agents, traction, and light therapies. Indications and contraindications for use, efficacy, and physiological response to these biophysical agents will be covered. The student will build on previously taught communication skills, working within the plan of care, and medical documentation. Clinical skills will be practiced in the lab.

PTAT 1033 – Therapeutic Exercise I

This course will cover the basic principles of exercise, types of exercise, therapeutic goals for exercise, and rationale of the implementation and progression of therapeutic exercises within the plan of care. The student will learn to monitor physiological responses to exercise and make adaptations as appropriate, analyze gait cycle and identify gait deviations, perform postural assessments, and functional training through therapeutic exercise. Clinical skills will be practiced in the lab. [RED]

PTAT 1122 – Pathophysiology for PTAs

In this course the student will gain knowledge of various organ systems of the human body, and explore the etiology, pathophysiology, signs/symptoms, course of treatment, effects of aging, and effect of disease condition on patient health, roles, family/caregivers, and therapeutic care. Basic pharmacology commonly seen in practice settings will be covered. [RED]

PTAT 1203 – Basic Patient Care Skills

This course covers basic patient care skills, including assessment of vital signs, identifying emergency situations, understanding the hospital environment and medical equipment, asepsis techniques, anthropometric measurements, patient interviewing, positioning and draping techniques, wheelchair management, use of assistive devices for gait, and patient mobility and transfer techniques. Students will build upon medical record review, understanding of the plan of care, and medical documentation. Clinical skills will be practiced in the lab. [RED]

PTAT 1213 – Clinical Practice I

This is the first of three clinical educational courses in the PTA program. It offers the student the opportunity to apply learned skills and knowledge in a clinical setting under the direct supervision of a licensed physical therapist. The student will apply basic clinical skills, engage in clinical reasoning, perform medical chart review, and document patient care experiences in a medical record. The student will develop professional behaviors in the clinical setting. This is a full-time 3-week clinical experience (120 hours). [RED]

PTAT 1232 – Clinical Procedures

This course covers massage techniques, pulmonary rehabilitation, peripheral joint mobilization, use of orthotics, wound management, edema management techniques, and environmental and ergonomic assessment. Clinical Skills will be practiced in the lab. [RED]

PTAT 2011 – Orthopedic Management for PTAs

This course will cover various orthopedic conditions, including etiology, signs/symptoms, surgical management, and therapeutic management both pre and postoperatively. Students will explore conditions affecting the shoulder, elbow, wrist/hand, hip, knee, ankle/foot, and spine. Students will further develop their ability to work within the plan of care and progress a treatment plan. [RED]

PTAT 2033 – Therapeutic Exercise II

This course will build on students' knowledge of therapeutic exercise, covering cardiac rehabilitation spinal stabilization, advanced balance training, work specific reconditioning programs, and the application of exercise with specialized patient populations, including geriatric and women's health. Amputations and prosthetic use and care will be covered. Clinical skills will be practiced in the lab. [RED]

PTAT 2043 – Neurology & Rehabilitation for PTAs

This course covered rehabilitation techniques for individuals with neurological disorders. Typical and atypical development will be discussed, including gross and fine motor milestones, righting and equilibrium reactions, and developmental reflexes. Students will explore a variety of neurological conditions affecting both pediatric and adult populations, including current theory, treatment approaches, and use of age-appropriate interventions. Clinical skills will be covered in lab. [RED]

PTAT 2121 – Professional Issues

During this course, the student will utilize experiences gained in clinical education courses to reflect upon and assess their performance as a student physical therapist assistant. The following topics will be discussed: treatment and progression of complex patients within an interprofessional team, contemporary healthcare settings and systems, adjustment of delivery of care to maintain a patient-centered approach, quality assurance, ethical and safe practice, leadership and advocacy, and medical fraud and abuse. Students will also learn resume writing skills and discuss professional behaviors as they prepare to transition from student to practitioner. [RED]

PTAT 2124 – Clinical Practice II

This is the second of three clinical education courses in the PTA program. It offers the student the opportunity to apply learned skills and knowledge in a clinical setting, under the direct supervision of a licensed physical therapist. The student will build upon previous clinical experience, working with patients with more complex issues, and increasing patient care load. The student will further develop communication skills and apply ethical decision making and values-based behaviors into patient care. This is a full-time 5-week clinical experience (200 hours). [RED]

PTAT 2134 – Clinical Practice III

This is the last of three clinical education courses in the PTA program. It offers the student the opportunity to apply learned skills and knowledge from all didactic coursework in a clinical setting, under the direct supervision of a licensed physical therapist. The student will build upon previous clinical experiences, working with more complex patients and a heavier caseload as appropriate. This course allows students to transition forward to becoming a practitioner, integrating knowledge with experience to become safe and effective entry-level physical therapist assistants. This is a full-time 6-week clinical experience (240 hours). [RED]

PHYSICS (PHYS)

PHYS 1114 – General Physics I

(N, L) General Physics I is an algebra-based course with a laboratory. This course includes classical mechanics in one and two dimensions. This course may also include thermodynamics, fluids, oscillations, and/or waves. (FA) *Corequisites: MATH 1613.* [RED]

PHYS 1214 – General Physics II

(N, L) General Physics II is an algebra-based course with a laboratory. This course is a continuation of PHYS1114 General Physics I and includes electricity, magnetism, circuits, and optics. This course may also include thermodynamics, fluids, modern physics, oscillations, and/or waves. (SP) *Prerequisite: C or better in PHYS 1114.* [RED]

PHYS 2014 – Engineering Physics I

(N, L) Physics I is a calculus based course for science and engineering majors. This course includes mechanics, heat, thermodynamics; with laboratory. *Prerequisite: C or better in MATH 2214 or concurrent enrollment.* [RED]

PHYS 2114 – Engineering Physics II

(N, L) Physics II is a calculus based course. This course is a continuation of PHYS2014 Engineering Physics I, topics include electricity, magnetism, geometrical and physical optics; with laboratory. *Prerequisite: C or better in PHYS 2014.* [RED]

PHYS 2300 – Special Topics in Physics

The study and/or analysis of a selected topic in physics. May involve individual and/or group study. The course number may be repeated with a different topic. *Prerequisite: instructor consent.* [RED]

POLITICAL SCIENCE (POLS)

POLS 1113 – American Federal Government

Studies of the principles, structure, processes and functions of the United States federal government. [RED]

POLS 2003 – Mass Media and Politics

This course provides an overview of the role of mass media in American politics including origin and development of relationship between press and politics, how the press covers politics, and the effects of mass media on public opinion, political elites, and institutions. [RED]

POLS 2103 – Introduction to Public Administration

This course introduces students to the day-to-day atmosphere of governmental organizations. Students will be introduced to the theory and practice of public administrators, as well as the role of public administrators in the public policy process. [RED]

POLS 2113 – Introduction to American State and Local Government

(S) An introduction to the organization, structure, functions, and administration of state and local governments. (SP) [RED]

POLS 2213 – Contemporary Issues in American Politics

This course is a study of significant contemporary political issues emphasizing events occurring at the time the course is offered. [RED]

POLS 2300 – Special Topics in Political Science

The study and/or analysis of a selected topic in Political Science. Individual and/or group study. May be repeated with a different topic. *Prerequisite: instructor consent.* [RED]

POLS 2303 – Introduction to International Relations

An introduction to the analysis of the structure of international relations, and sources of international influence, conflict, and cooperation. [RED]

POLS 2313 – Introduction to Political Theory

An introduction to the foundations of political philosophy. [RED]

POLS 2400 – Internship in Political Science

One-to-five-hour credit for a supervised internship in the field of political science. *Prerequisite: division chair consent.* [RED]

POLS 2603 – Introduction to Comparative Politics

Students will utilize basic theories and methods of comparative analysis in studying selected nation-states. The student will also examine current worldwide political issues and problems. Topics for analysis will include political development, culture, elites, parties and political change. [RED]

PSYCHOLOGY (PSYC)

PSYC 1113 – Introduction to Psychology

(S) A survey of the major areas of study in psychology such as: motivation, learning, physiology, personality, social psychology, abnormal behavior, perception, memory, cognition/thought and treatment. [RED]

PSYC 2113 – Psychology of Adjustment

(S) Course is devoted to the emotional health of human beings. Primary topics include emotions and their development, control and relationship to bodily and mental health, physiological factors affecting mental stability and a discussion of important personal problems. *Prerequisite: PSYC 1113.* [RED]

PSYC 2183 – Introduction to Counseling in Psychology

(S) Course includes a study of the principles, viewpoints, and approaches in the counseling situation. Also addresses the directive, non-directive, and eclectic techniques in counseling. This course is cross listed with SOCI 2313. (FA) *Prerequisite: PSYC 1113.* [RED]

PSYC 2213 – Introduction to Personality Theories

(S) An introductory course examining processes and various theoretical approaches to the study of personality such as: psychodynamic, behavioral, phenomenological, trait, and social learning theories. (SP) *Prerequisite: PSYC 1113.* [RED]

PSYC 2300 – Special Topics in Psychology

The study and/or analysis of a selected topic in Psychology. Individual and/or group study. May be repeated with a different topic. *Prerequisite: instructor consent.* [RED]

PSYC 2313 – Developmental Psychology

(S) A theoretical and research-based course that covers the social, emotional, physical and cognitive aspects of human development throughout the life span. [RED]

PSYC 2400 – Internship in Psychology

One to five hours credit for supervised internship in the field of psychology. *Prerequisite: division chair consent.* [RED]

PSYC 2543 – Introduction to Social Psychology

(S) A theoretical and research-based course that covers the social, emotional, physical and cognitive aspects of human development throughout the life span. This course is cross listed with SOCI 2523. (FA) *Prerequisite: PSYC 1113 or SOCI 1113.* [RED]

RELIGIOUS EDUCATION (RELI)

RELI 1023 – New Testament Survey

(H) Course examines history, literature and culture of the New Testament world and its contribution to Western Civilization. [RED]

RELI 1123 – Old Testament Survey

(H) Course examines history, literature, and culture of the Old Testament world and its contribution to Western Civilization. [RED]

RELI 2113 – Christian Ethics and Social Thought

(H) Course introduces the problems and methods of translating the Biblical faith into action in the contemporary world. [RED]

RELI 2123 – Comparative Religions

(H) Presents a historical and analytical approach to the major religions of the world. [RED]

SOCIOLOGY (SOCI)

SOCI 1113 – Principles of Sociology

(S) This course provides a general survey of the field of sociology. Emphasis is placed on the foundation of human society, institutional organizations, and social change. [RED]

SOCI 2113 – Introduction to Social Services

(S) This course is designed to acquaint the student with the various areas of social service. Includes an introduction to the philosophy, purposes, and functions of various agencies. (FA) *Prerequisite: SOCI 1113.* [RED]

SOCI 2183 – Introduction to Counseling

(S) This course includes a study of the principles, viewpoints, and approaches in counseling situations. Also addresses the directive, non-directive, and eclectic techniques in counseling. This course is cross listed with PSYC 2183. (FA) *Prerequisite: SOCI 1113.* [RED]

SOCI 2300 – Special Topics in Sociology

The study and/or analysis of a selected topic in Sociology. Individual and/or group study. May be repeated with a different topic. *Prerequisite: instructor consent.* [RED]

SOCI 2323 – Social Problems

(S) An overview of current social problems in the United States. Analyzes sociological and ideological definitions of social problems and considers a variety of possible solutions. (FA) *Prerequisite: SOCI 1113.* [RED]

SOCI 2400 – Internship in Sociology

One-to-five-hour credit for a supervised internship in the field of sociology. *Prerequisite: division chair consent.* [RED]

SOCI 2413 – Cultural Anthropology

(H, S) The cross-cultural study of the institutions of human society. (SP) *Prerequisite: SOCI 1113.* [RED]

SOCI 2423 – Sociology of the Family

(S) This course includes an overview of the origin and development of marriage customs and systems of family organization. A cross-cultural survey of the family as a basic institution in human societies is also included. (SP) *Prerequisite: SOCI 1113.* [RED]

SOCI 2523 – Social Psychology

(S) This course integrates sociology and psychology in the study of personality development, social adjustment, and social control. This course is cross listed with PSYC 2543. *Prerequisite: PSYC 1113 or SOCI 1113.* [RED]

SPANISH (SPAN)

SPAN 1113 – Introductory Spanish I

This course is an introduction to the productive (speaking and/or writing) and receptive (listening/visual comprehension) skills appropriate to Spanish. This course introduces vocabulary, pronunciation, writing system, and reading and writing of short, simple texts. [RED]

SPAN 1223 – Introductory Spanish II

This course is a continuous building of the productive and receptive skills of Spanish. This course is an expansion of vocabulary, the use of non-present tenses and verbal aspects, and more complex grammatical structures. Students for whom Spanish is their native language may not receive credit for this course. *Prerequisite: SPAN 1113.* [RED]

SPEECH (SPCH)

SPCH 1013 – Principles of Listening

Acquaints the student with the components of the listening process; identifies common obstacles to listening; and promotes effective listening strategies in a variety of personal and professional contexts. **(SP)** [RED]

SPCH 1113 – Introduction to Communication (Performance)

Principles and techniques of preparing for, participating in, and evaluating at the interpersonal and public levels, or exclusively oral communication (e.g., public speaking). [RED]

SPCH 2300 – Special Topics in Speech

The study and/or analysis of a selected topic in Speech. Individual and/or group study. May be repeated with a different topic. *Prerequisite: instructor consent.* [RED]

STATISTICS (STAT)

STAT 0111 – Elementary Statistics Corequisite

The purpose of this course is to provide extra help and resources, in a structured setting, to students with a deficiency in concepts required for STAT 2013, Elementary Statistics. The lab is required of students not meeting appropriate placement measures and are enrolled in the companion STAT 2013 course. STAT 0111 credits do not count toward associate degrees. [RED]

STAT 2013 – Elementary Statistics

(A) Includes descriptive statistics (histograms, pie charts, pictograms, graphs, etc.); summary statistics (central tendency – mean, median, mode; variability – variance, standard deviation, range); basic probability concepts; statistical distributions; Binomial Distribution; Normal Distribution; distribution of the sample mean (proportion); confidence intervals; hypothesis testing (generally one population Normal & binomial, and difference in means or proportions situations). *Prerequisite: College-level placement in mathematics or concurrent enrollment in co-requisite instruction.* [RED]