

Courses

A&VS 150. Introduction to Animal Science. 2 Hours.

Survey of major disciplines in animal and veterinary sciences with emphasis on related terminology; study of the development of breeds of livestock and their identification.

A&VS 191. First-Year Seminar. 1-3 Hours.

Engages students in active learning strategies that enable effective transition to college life at WVU. Students will explore school, college and university programs, policies and services relevant to academic success. Provides active learning activities that enable effective transition to the academic environment. Students examine school, college and university programs, policies and services.

A&VS 251. Principles of Animal Science. 4 Hours.

PR: Corequisite of A&VS 251L. A comparative study of the production of meat, milk, eggs and wool. Nutrition, physiology genetics, hygiene and physical environment, and economics are discussed as bases for sound managerial decisions.

A&VS 251L. Principles of Animal Science Laboratory. 0 Hours.

PR: Corequisite of A&VS 251. Principles of Animal Science - A&VS 251 Laboratory.

A&VS 275. Companion Animal Science. 3 Hours.

Basic physiology, nutrition and genetics; economic and ethical consideration of pet ownership; benefits of companion animals in society; aspects of handling and training, behavior, and common health diseases and parasite problems of pet animals.

A&VS 293. Special Topics. 1-6 Hours.

PR: Consent. Investigation of topics not covered in regularly scheduled courses.

A&VS 298. Honors. 1-3 Hours.

PR: Students in Honors Program and consent by the honors director. Independent reading, study, or research.

A&VS 393. Special Topics. 1-6 Hours.

PR: Consent. Investigation of topics not covered in regularly scheduled courses.

A&VS 480. Assigned Topics. 1-4 Hours.

To be eligible to register in A&VS 480, the student must: (1) be in good standing, (2) obtain approval of the instructor supervising the topic, and (3) obtain approval from the instructor assigned the course responsibility.

A&VS 480A. Assigned Topics. 1-4 Hours.

To be eligible to register in A&VS 480A, the student must: (1) be in good standing, (2) obtain approval of the instructor supervising the topic, and (3) obtain approval from the instructor assigned the course responsibility.

A&VS 480B. Assigned Topics. 1-4 Hours.

To be eligible to register in A&VS 480B, the student must (1) be in good standing, (2) obtain approval of the instructor supervising the topic, and (3) obtained approval from the instructor assigned the course responsibility.

A&VS 480C. Assigned Topics. 1-4 Hours.

To be eligible to register in A&VS 480C, the student must (1) be in good standing, (2) obtain approval of the instructor supervising the topic, and (3) obtain approval from the instructor assigned the course responsibility.

A&VS 480D. Assigned Topics. 1-4 Hours.

To be eligible to register in A&VS 480D, the student must (1) be in good standing, (2) obtain approval of the instructor supervising the topic, and (3) obtain approval from the instructor assigned the course responsibility.

A&VS 480E. Assigned Topics. 1-4 Hours.

To be eligible to register in A&VS 480E, the student must (1) be in good standing, (2) obtain approval of the instructor supervising the topic, and (3) obtained approval from the instructor assigned the course responsibility.

A&VS 480F. Assigned Topics. 1-4 Hours.

To be eligible to register in A&VS 480F, the student must (1) be in good standing, (2) obtain approval of the instructor supervising the topic, and (3) obtain approval from the instructor assigned the course responsibility.

A&VS 480G. Assigned Topics. 1-4 Hours.

To be eligible to register in A&VS 480G, the student must (1) be in good standing, (2) obtain approval of the instructor supervising the topic, and (3) obtain approval from the instructor assigned the course responsibility.

A&VS 480H. Assigned Topics. 1-4 Hours.

To be eligible to register in A&VS 480H, the student must (1) be in good standing, (2) obtain approval of the instructor supervising the topic, and (3) obtain approval from the instructor assigned the course responsibility.

A&VS 480I. Assigned Topics. 1-4 Hours.

To be eligible to register in A&VS 480I, the student must (1) be in good standing, (2) obtain approval of the instructor supervising the topic, and (3) obtain approval from the instructor assigned the course responsibility.

A&VS 480J. Assigned Topics. 1-4 Hours.

To be eligible to register in A&VS 480J, the student must (1) be in good standing, (2) obtain approval of the instructor supervising the topic, and (3) obtain approval from the instructor assigned the course responsibility.

A&VS 480K. Assigned Topics. 1-6 Hours.

To be eligible to register in A&VS 480K, the student must (1) be in good standing, (2) obtain approval of the instructor supervising the topic, and (3) obtain approval from the instructor assigned the course responsibility.

A&VS 480L. Assigned Topics. 1-4 Hours.

To be eligible to register in A&VS 480L, the student must (1) be in good standing, (2) obtain approval of the instructor supervising the topic, and (3) obtain approval from the instructor assigned the course responsibility.

A&VS 480M. Assigned Topics. 1-4 Hours.

To be eligible to register in A&VS 480M, the student must (1) be in good standing, (2) obtain approval of the instructor supervising the topic, and (3) obtain approval from the instructor assigned the course responsibility.

A&VS 480N. Assigned Topics. 1-4 Hours.

To be eligible to register in A&VS 480N, the student must (1) be in good standing, (2) obtain approval of the instructor supervising the topic, and (3) obtain approval from the instructor assigned the course responsibility.

A&VS 480O. Assigned Topics. 1-4 Hours.

To be eligible to register for A&VS 480O, the student must (1) be in good standing, (2) obtain approval of the instructor supervising the topic, (3) obtain approval from the instructor assigned the course responsibility.

A&VS 480P. Assigned Topics. 1-4 Hours.

To be eligible to register in A&VS 480P, the student must (1) be in good standing, (2) obtain approval of the instructor supervising the topic, and (3) obtain approval from the instructor assigned the course responsibility.

A&VS 480Q. Assigned Topics. 1-4 Hours.

To be eligible to register in A&VS 480Q, the student must (1) be in good standing, (2) obtain approval of the instructor supervising the topic, and (3) obtain approval from the instructor assigned the course responsibility.

A&VS 480R. Assigned Topics. 1-4 Hours.

To be eligible to register in A&VS 480R, the student must (1) be in good standing, (2) obtain approval of the instructor supervising the topic, and (3) obtain approval from the instructor assigned the course responsibility.

A&VS 480S. Assigned Topics. 1-4 Hours.

To be eligible to register in A&VS 480S, the student must (1) be in good standing, (2) obtain approval of the instructor supervising the topic, and (3) obtain approval from the instructor assigned the course responsibility.

A&VS 480T. Assigned Topics. 1-4 Hours.

To be eligible to register in A&VS 480T, the student must (1) be in good standing, (2) obtain approval of the instructor supervising the topic, and (3) obtain approval from the instructor assigned the course responsibility.

A&VS 480U. Assigned Topics. 1-4 Hours.

To be eligible to register in A&VS 480U, the student must (1) be in good standing, (2) obtain approval of the instructor supervising the topic, and (3) obtain approval from the instructor assigned the course responsibility.

A&VS 480V. Assigned Topics. 1-4 Hours.

To be eligible to register in A&VS 480V, the student must (1) be in good standing, (2) obtain approval of the instructor supervising the topic, and (3) obtain approval from the instructor assigned the course responsibility.

A&VS 480W. Assigned Topics. 1-4 Hours.

To be eligible to register in A&VS 480W, the student must (1) be in good standing, (2) obtain approval of the instructor supervising the topic, and (3) obtain approval from the instructor assigned the course responsibility.

A&VS 480X. Assigned Topics. 1-4 Hours.

To be eligible to register in A&VS 480X, the student must (1) be in good standing, (2) obtain approval of the instructor supervising the topic, and (3) obtain approval from the instructor assigned the course responsibility.

A&VS 480Y. Assigned Topics. 1-4 Hours.

To be eligible to register in A&VS 480Y, the student must (1) be in good standing, (2) obtain approval of the instructor supervising the topic, and (3) obtain approval from the instructor assigned the course responsibility.

A&VS 480Z. Assigned Topics. 1-4 Hours.

To be eligible to register in A&VS 480Z, the student must (1) be in good standing, (2) obtain approval of the instructor supervising the topic, and (3) obtain approval from the instructor assigned the course responsibility.

A&VS 491. Professional Field Experience. 1-18 Hours.

PR: Consent. (May be repeated up to a maximum of 18 hours.) Prearranged experiential learning program, to be planned, supervised, and evaluated for credit by faculty and field supervisors. Involves temporary placement with public or private enterprise for professional competence development.

A&VS 499. Global Service Learning. 3 Hours.

PR: Consent. Theory and practice of global service-learning. The main objective will be to pair the experiential aspects of meaningful and sustained service in the host community with work from the student's anchor course by offering a methodological framework for cultural immersion and community service as well as adding to the content of the anchor course.

ACCT 201. Principles of Accounting 1. 3 Hours.

This course introduces basic concepts of financial and managerial accounting with emphasis on how accounting reports are used by internal and external users.

ACCT 202. Principles of Accounting 2. 3 Hours.

PR: ACCT 201 with a minimum grade of C-. This course introduces financial accounting concepts and reporting with an emphasis on measuring, recording and reporting transactions for business entities.

ACCT 298. Honors. 1-3 Hours.

PR: Students in Honors Program and consent by the honors director. Independent reading, study, or research.

ACCT 393. Special Topics. 1-6 Hours.

PR: Consent. Investigation of topics not covered in regularly scheduled courses.

ACE 106. Athletic Coaching Education. 3 Hours.

Overview of athletic coaching profession including careers opportunities, critical current issues/trends, professional standards and the professional organizations.

ACE 168. Sport Officiating. 3 Hours.

Study of the art, science, industry standards, and best practices of the officiating profession across all levels of sport. This is an undergraduate lecture and interaction based course that will require students to read, interact, synthesize information pertaining to the professional duties and requirements of sports officiating profession.

ACE 215. Sport for the Exceptional Athlete. 3 Hours.

Examines the past, present and future of sport for athletes with disabilities and those competing at the Masters-level. The focus is on the coaching of these unique populations of competitive and recreational athletes.

ACE 256. Principles and Problems of Coaching. 3 Hours.

Designed to teach students the principles and problems of interscholastic athletic coaching.

ACE 265. Diversity and Sport. 3 Hours.

Covers historical and current topics relevant to diversity in sport as it relates to current sport practices. Practical strategies for facilitating acceptance of diversity within individual/team sports are discussed.

ACE 298. Honors. 1-3 Hours.

PR: Students in Honors Program and consent by the honors director. Independent reading, study, or research.

ACE 393. Special Topics. 1-6 Hours.

PR: Consent. Investigation of topics not covered in regularly scheduled courses.

ACE 490. Teaching Practicum. 1-3 Hours.

PR: Consent. Teaching practice as a tutor or assistant.

ACE 492. Directed Study. 1-3 Hours.

Directed study, reading, and/or research.

ACE 496. Senior Thesis. 1-3 Hours.

PR: Consent.

ACE 497. Research. 1-6 Hours.

Independent research projects.

ACE 498. Honors. 1-3 Hours.

PR: Students in Honors Program and consent by the honors director. Independent reading, study, or research.

ADPR 215. Introduction to Advertising and Public Relations. 3 Hours.

PR: College of Media majors only. This introductory course in strategic communications provides a broad overview of professional advertising and public relations practices and their role in society. (Course is equivalent to ADV 215, PR 215, & STCM 215.).

ADRC 101. Essential Skills in Adventure Recreation. 3 Hours.

This course focuses on foundational outdoor skills needed to safely participate in and lead trips in outdoor settings. Students learn and practice equipment selection and use, outdoor cooking, map & compass navigation and wilderness first aid in classroom and outdoor settings.

ADV 298. Honors. 1-3 Hours.

PR: Students in Honors Program and consent by the honors director. Independent reading, study, or research.

ADV 393. Special Topics. 1-6 Hours.

PR: Consent. Investigation of topics not covered in regularly scheduled courses.

ADV 492. Directed Study. 1-3 Hours.

Directed study, reading, and/or research.

AEM 293. Special Topics. 1-6 Hours.

PR: Consent. Investigation of topics not covered in regularly scheduled courses.

AEM 298. Honors. 1-3 Hours.

PR: Students in Honors Program and consent by the honors director. Independent reading, study, or research.

AEM 341. General Microbiology. 3 Hours.

PR: CHEM 115 with a minimum grade of C- and PR or CONC: AEM 341L. Introductory morphological, cultural, and physiological characteristics of microorganisms; application of microbiology to agriculture, home economics, and health.

AEM 341L. General Microbiology Laboratory. 1 Hour.

PR or CONC: AEM 341. General Microbiology - AEM 341 Laboratory.

AEM 393. Special Topics. 1-6 Hours.

PR: Consent. Investigation of topics not covered in regularly scheduled courses.

AEM 497. Research. 1-6 Hours.

Independent research projects.

AFCS 298. Honors. 1-3 Hours.

PR: Students in Honors Program and consent by the honors director. Independent reading, study, or research.

AFCS 393. Special Topics. 1-6 Hours.

PR: Consent. Investigation of topics not covered in regularly scheduled courses.

AFCS 490. Teaching Practicum. 1-3 Hours.

PR: Consent. Teaching practice as a tutor or assistant.

AFCS 491. Professional Field Experience. 1-18 Hours.

PR: Consent. (May be repeated up to a maximum of 18 hours.) Prearranged experiential learning program, to be planned, supervised, and evaluated for credit by faculty and field supervisors. Involves temporary placement with public or private enterprise for professional competence development.

AFCS 492. Directed Study. 1-3 Hours.

Directed study, reading, and/or research.

AFCS 497. Research. 1-6 Hours.

Independent research projects.

AGBI 293. Special Topics. 1-6 Hours.

PR: Consent. Investigation of topics not covered in regularly scheduled courses.

AGBI 298. Honors. 1-3 Hours.

PR: Students in Honors Program and consent by the honors director. Independent reading, study, or research.

AGBI 393. Special Topics. 1-6 Hours.

PR: Consent. Investigation of topics not covered in regularly scheduled courses.

AGBI 410. Introductory Biochemistry. 3 Hours.

PR: CHEM 231 or (CHEM 233 and CHEM 233L). Introduction to chemistry of cellular constituents (proteins, amino acids, carbohydrates, lipids, nucleic acids, enzymes and coenzymes) and their metabolism in animals and plants.

AGBI 495. Independent Study. 1-6 Hours.

Faculty-supervised study of topics not available through regular course offerings.

AGBI 497. Research. 1-6 Hours.

Independent research projects.

AGEE 101. Global Food and Agricultural Industry. 3 Hours.

Examination of the history and current developments, structures, functions, and importance of the international food and agricultural industry; issues, concerns and interrelationships and their impacts on American agriculture and society.

AGEE 103S. Basics of Agricultural Mechanization. 3 Hours.

Study and application of the foundation area associated with agricultural mechanization.

AGEE 110. Microcomputer Applications in Agricultural Education. 3 Hours.

PR: Consent. Microcomputer applications in the instructional process of agricultural education; use of applications software, agricultural software, and data bases; and methods of integrating microcomputers into secondary school agriculture and extension programs.

AGEE 187. Welding and Heat Treatment. 1 Hour.

Principles and practices of metal arc welding using mild steel. Safety and electrode selection for various metals is covered. Designed for agriculture applied science students.

AGEE 203. Agriculture Mechanics Practica. 3 Hours.

Theory and practice of designing and constructing structures, electrical circuits, masonry, equipment maintenance, and surveying.

AGEE 220. Group Organization and Leadership. 3 Hours.

Study of the impact of leaders and organized groups on societies. Role of groups in conveying cultural norms. Principles and techniques involved in forming and directing organizations in providing effective leadership.

AGEE 298. Honors. 1-3 Hours.

PR: Students in Honors Program and consent by the honors director. Independent reading, study, or research.

AGEE 303. Small Engines and Hydraulics. 3 Hours.

Theory and practice of disassembling, assembling and maintaining small gasoline engines and hydraulic devices.

AGEE 393. Special Topics. 1-6 Hours.

PR: Consent. Investigation of topics not covered in regularly scheduled courses.

AGEE 497. Research. 1-6 Hours.

Independent research projects.

AGRL 111. Professions in Agriculture. 1 Hour.

An overview of subject matter related to agriculture in current society. Emphasis on agricultural organizations, environmental and food issues, careers, and programs within the college.

AGRL 112. Professions in Agriculture. 1 Hour.

Continuation of AGRL 111.

AGRL 191. First-Year Seminar. 1-3 Hours.

Engages students in active learning strategies that enable effective transition to college life at WVU. Students will explore school, college and university programs, policies and services relevant to academic success. Provides active learning activities that enable effective transition to the academic environment. Students examine school, college and university programs, policies and services.

AGRL 290. Teaching Practicum. 1-3 Hours.

PR: Consent. Teaching practice as a tutor or assistant.

AGRL 291. Professional Field Experience. 1-18 Hours.

PR: Consent. (may be repeated for a maximum of 18 credit hours.) Prearranged experiential learning program, to be planned, supervised, and evaluated for credit by faculty and field supervisors. Involves temporary placement with public or private enterprise for professional competence development.

AGRL 298. Honors. 1-3 Hours.

PR: Students in Honors Program and consent by the honors director. Independent reading, study, or research.

AGRL 393. Special Topics. 1-6 Hours.

PR: Consent. Investigation of topics not covered in regularly scheduled courses.

AGRL 497. Research. 1-6 Hours.

Independent research projects.

AGRN 293. Special Topics. 1-6 Hours.

PR: Consent. Investigation of topics not covered in regularly scheduled courses.

AGRN 298. Honors. 1-3 Hours.

PR: Students in Honors Program and consent by the honors director. Independent reading, study, or research.

AGRN 315. Turfgrass Management. 3 Hours.

PR: AGRN 202 and AGRN 203 and PLSC 206 or consent. Establishment, maintenance and adaptation of grasses for lawns, golf courses, parks, athletic and playing fields, and roadsides. Associating differential plant responses with soil, climatic and biotic factors. (3 hr. lec.).

AGRN 393. Special Topics. 1-6 Hours.

PR: Consent. Investigation of topics not covered in regularly scheduled courses.

AGRN 492. Directed Study. 1-3 Hours.

Directed study, reading, and/or research.

AGRN 495. Independent Study. 1-6 Hours.

Faculty-supervised study of topics not available through regular course offerings.

AGRN 497. Research. 1-6 Hours.

Independent research projects.

ANES 393. Special Topics. 1-6 Hours.

PR: Consent. Investigation of topics not covered in regularly scheduled courses.

ANES 490. Teaching Practicum. 1-3 Hours.

PR: Consent. Teaching practice as a tutor or assistant.

ANES 491. Professional Field Experience. 1-18 Hours.

PR: Consent (may be repeated up to a maximum of 18 hours.) Prearranged experiential learning program, to be planned, supervised, and evaluated for credit by faculty and field supervisors. Involves temporary placement with public or private enterprise for professional competence development.

ANES 492. Directed Study. 1-3 Hours.

Directed study, reading, and/or research.

ANES 493. Special Topics. 1-6 Hours.

PR: Consent. Investigation of topics not covered in regularly scheduled courses.

ANES 494. Seminar. 1-3 Hours.

PR: Consent. Presentation and discussion of topics of mutual concern to students and faculty.

ANES 495. Independent Study. 1-6 Hours.

Faculty supervised study of topics not available through regular course offerings.

ANES 496. Senior Thesis. 1-3 Hours.

PR: Consent.

ANES 497. Research. 1-6 Hours.

Independent research projects.

ANES 498. Honors. 1-3 Hours.

PR: Students in Honors Program and consent by the honors director. Independent reading, study, or research.

ANNU 260. Animal Nutrition. 3 Hours.

PR: Two courses in chemistry. Digestion and metabolism of food nutrients, nutrient requirements of farm animals, and nutritive values of feeds and rations.

ANNU 293. Special Topics. 1-6 Hours.

PR: Consent. Investigation of topics not covered in regularly scheduled courses.

ANNU 298. Honors. 1-3 Hours.

PR: Students in Honors Program and consent by the honors director. Independent reading, study, or research.

ANNU 492. Directed Study. 1-3 Hours.

Directed study, reading, and/or research.

ANNU 497. Research. 1-6 Hours.

Independent research projects.

ANPH 293. Special Topics. 1-6 Hours.

PR: Consent. Investigation of topics not covered in regularly scheduled courses.

ANPH 298. Honors. 1-3 Hours.

PR: Students in Honors Program and consent by the honors director. Independent reading, study, or research.

ANPH 393. Special Topics. 1-6 Hours.

PR: Consent. Investigation of topics not covered in regularly scheduled courses.

ANPH 492. Directed Study. 1-3 Hours.

Directed study, reading, and/or research.

ANPH 495. Independent Study. 1-6 Hours.

Faculty supervised study of topics not available through regular course offerings.

ANPH 497. Research. 1-6 Hours.

Independent research projects.

ANPR 293. Special Topics. 1-6 Hours.

PR: Consent. Investigation of topics not covered in regularly scheduled courses.

ANPR 298. Honors. 1-3 Hours.

PR: Students in Honors Program and consent by the honors director. Independent reading, study, or research.

ANPR 308. Animal Production Experience. 1-4 Hours.

Experience in operating a dairy or livestock farm, including layers or broilers, calving, lambing, or farrowing of hogs. (Can be repeated up to a maximum of 4 credits. 3 hr. lab./ per hr. of credit.)

ANPR 338L. Horse/Livestock/Poultry Evaluation Laboratory. 3 Hours.

Appraisal of horses, cattle, sheep, poultry, and swine. Evaluation of scientific techniques used in selecting those species. Tours of representative flocks, herds and stables will be required.

ANPR 339L. Advanced Evaluation of Animal Products Laboratory. 1-4 Hours.

PR: ANPR 336 or ANPR 338 or ANPR 338L or consent. Advanced selection, evaluation and grading of domestic livestock species and animal products. Tours of representative flocks, herds and processing plants will be required. (Can be repeated up to a maximum of 4 credits.)

ANPR 350. Milk Production. 3 Hours.

PR: Corequisite of ANPR 350L. This is a course on dairy cattle management. Topics will include an introduction to the US dairy industry, dairy breeds, nutrition and feeding, genetics and breeding, reproduction, raising of replacement animals, dairy facilities, mammary gland anatomy and milk quality, herd health, and general management of the dairy herd.

ANPR 350L. Milk Production Laboratory. 0 Hours.

Coreq: ANPR 350. Milk Production - ANPR 350 Laboratory.

ANPR 393. Special Topics. 1-6 Hours.

PR: Consent. Investigation of topics not covered in regularly scheduled courses.

ANPR 492. Directed Study. 1-3 Hours.

Directed study, reading, and/or research.

ANPR 495. Independent Study. 1-6 Hours.

Faculty supervised study of topics not available through regular course offerings.

ANPR 497. Research. 1-6 Hours.

Independent research projects.

ANTH 105. Introduction to Anthropology. 3 Hours.

Essentials of human evolution and prehistory with a concentration on the varieties of languages and cultures found among peoples of the world.

ANTH 252. Biological Anthropology. 3 Hours.

Overview of human genetics, human diversity, human osteology, primate studies, and fossil evidence for human evolution.

ANTH 254. Cultural Anthropology. 3 Hours.

Introduction to the history, methods, and current directions of cultural anthropology. Focus on living cultures across the world, encompassing the whole range of human activities. Consideration of identity, economy, politics, kinship, meaning, language, and inequality.

ANTH 258. Introduction to Archaeology. 3 Hours.

Comprehensive introduction to the field of archaeology. Course investigates the methods and theories used by archaeologists to understand culture change through time, and the reconstruction of the past through material culture analysis.

ARBC 298. Honors. 1-3 Hours.

PR: Students in Honors Program and consent by the honors director. Independent reading, study, or research.

ARBC 492. Directed Study. 1-3 Hours.

Directed study, reading, and/or research.

ARBC 495. Independent Study. 1-6 Hours.

Faculty supervised study of topics not available through regular course offerings.

ARBC 497. Research. 1-6 Hours.

Independent research projects.

ARE 110. Agribusiness Accounting. 3 Hours.

Introduction to accounting for agricultural, rural, and small business managers. Emphasis on the accounting cycle, analysis and interpretation of financial statements, income taxes, and managerial accounting. (Students having prior college credit in accounting are not eligible for this course.).

ARE 150. Introductory Agricultural and Agribusiness Economics. 3 Hours.

Introduction to basic agricultural economics and agribusiness concepts, and the application of these concepts to agricultural and agribusinesses issues.

ARE 204. Agribusiness Management. 3 Hours.

Overview of the agribusiness decision-making process, and the functions of agribusiness management; analysis of financial statements and budgeting for evaluating profitability of alternative enterprises and practices.

ARE 220. Introductory Environmental and Resource Economics. 3 Hours.

Economic analysis of environmental pollution, natural resource conservation and management, outdoor recreation, public land use, wildlife resources, water use, property rights, and benefit-cost issues.

ARE 298. Honors. 1-3 Hours.

PR: Students in Honors Program and consent by the honors director. Independent reading, study, or research.

ARE 393. Special Topics. 1-6 Hours.

PR: Consent. Investigation of topics not covered in regularly scheduled courses.

ARE 492. Directed Study. 1-3 Hours.

Directed study, reading, and/or research.

ARE 497. Research. 1-6 Hours.

Independent research projects.

ARHS 101. Landmarks of World Art. 3 Hours.

Introduction to the study of art history from prehistory to the present in which major landmarks of world art and architecture are considered as aesthetic objects, cultural documents and within their socio-historical contexts.

ARHS 298. Honors. 1-3 Hours.

PR: Students in Honors Program and consent by the honors director. Independent reading, study, or research.

ARHS 490. Teaching Practicum. 1-3 Hours.

PR: Consent. Teaching practice as a tutor or assistant.

ARHS 492. Directed Study. 1-3 Hours.

Directed study, reading, and/or research.

ARHS 496. Senior Thesis. 1-3 Hours.

PR: Consent.

ART 109S. Basic Drawing 1 for Non-Majors. 3 Hours.

A beginning-level studio experience emphasizing the application of techniques and materials in rendering. Designed for non-art majors and those seeking to improve their portfolios to gain entrance into the BFA studio program.

ART 298. Honors. 1-3 Hours.

PR: Students in Honors Program and consent by the honors director. Independent reading, study, or research.

ART 393. Special Topics. 1-3 Hours.

PR: Consent. Investigation of topics not covered in regularly scheduled courses.

ART 490. Teaching Practicum. 1-3 Hours.

PR: Consent. Teaching practice as a tutor or assistant.

ASP 298. Honors. 1-3 Hours.

PR: Students in Honors Program and consent by the honors director. Independent reading, study, or research.

ASP 393. Special Topics. 1-6 Hours.

PR: Consent. Investigation of topics not covered in regularly scheduled courses.

ASP 490. Teaching Practicum. 1-3 Hours.

PR: Consent. Teaching practice as a tutor or assistant.

ASP 492. Directed Study. 1-3 Hours.

Directed study, reading, and/or research.

ASP 494. Seminar. 1-3 Hours.

PR: Consent. Presentation and discussion of topics of mutual concern to students and faculty.

ASP 495. Independent Study. 1-6 Hours.

Faculty supervised study of topics not available through regular course offerings.

ASP 496. Senior Thesis. 1-3 Hours.

PR: Consent.

ASP 497. Research. 1-6 Hours.

Independent research projects.

ASP 498. Honors. 1-3 Hours.

PR: Students in Honors Program and consent by the honors director. Independent reading, study, or research.

ASTR 106. Descriptive Astronomy. 3 Hours.

The celestial sphere, star time, solar time, Kepler's laws, H-R diagram and modern developments. No sophisticated mathematics used; only simple geometrical arguments employed.

ASTR 106L. Descriptive Astronomy Laboratory. 1 Hour.

PR or CONC: ASTR 106. Introduction to modern astronomical techniques and practices through research-quality astronomical data collection and analysis, computer simulation, and hands-on activities. Includes study of objects in our solar system, in the Milky Way, and located much farther away in the vast reaches of space. Students engage in authentic scientific practices while exploring the universe.

ASTR 298. Honors. 1-3 Hours.

PR: Students in Honors Program and consent by the honors director. Independent reading, study, or research.

ASTR 393. Special Topics. 1-6 Hours.

PR: Consent. Investigation of topics not covered in regularly scheduled courses.

ASTR 490. Teaching Practicum. 1-3 Hours.

PR: Consent. Teaching practice as a tutor or assistant.

ASTR 492. Directed Study. 1-3 Hours.

Directed study, reading, and/or research.

ASTR 493. Special Topics. 1-6 Hours.

PR: Consent. Investigation of topics not covered in regularly scheduled courses.

ASTR 495. Independent Study. 1-6 Hours.

Faculty supervised study of topics not available through regular course offerings.

ASTR 497. Research. 1-6 Hours.

Independent research projects.

BCOR 199. Introduction to Business. 3 Hours.

This course introduces the student to the major business disciplines, basic business communications, and the University environment.

BCOR 299. Business Communication. 3 Hours.

PR: WVU sections require (ENGL 101 or ENGL 1C1) or ENGL 103 each with a minimum grade of C-, PSC sections require ENGL 101 with a minimum grade of C- and WVUIT sections require (ENGL 101 and ENGL 102). This course is designed to prepare you to participate effectively in workplace communication. Professionals compose for practical purposes: to solve problems, to develop proposals to increase business, and to communicate to others both inside and outside the organization. Throughout the semester, you will increase your familiarity with common business communication genres, and you will prepare materials within these genres.

BCOR 310. Esports Business. 3 Hours.

Students will learn about the esports market as a sub-set of the larger gaming industry. The course will explore the different roles of the developer, publisher, esports organizations, and the esports teams, what kinds of investments are relevant to each of those stakeholders, and what their financial concerns are.

BCOR 370. Principles of Management. 3 Hours.

This course will serve as an introduction to the process of managing and working effectively with people. The primary objective of this course is to provide students with an overview of the basic principles involved in effective management practices, including general and specific elements of planning, organizing, leading, and controlling.

BIOL 101. General Biology 1. 3 Hours.

PR or CONC: BIOL 101L or BIOL 103. Introductory course in biology: cellular, organismal, and population genetics, including reproduction, growth and development, and evolution.

BIOL 101L. General Biology 1 Laboratory. 1 Hour.

PR or CONC: BIOL 101. Experiments in biology: genetics and evolution; reproduction, growth, and development of cells, organisms, and populations.

BIOL 102. General Biology 2. 3 Hours.

PR or CONC: BIOL 102L or BIOL 104. Introductory biology: energetics and physiology of cells, organisms, and populations, including regulation and control of multicellular organisms.

BIOL 102L. General Biology 2 Laboratory. 1 Hour.

PR or CONC: BIOL 102. Experiments in biology: materials exchange, actions of enzymes, photosynthesis and respiration, and physiology of organisms.

BIOL 105. Environmental Biology. 3 Hours.

Population growth and human impacts on the environment, including ecosystem destruction, biological diversity, pollution, and global climate change are explored to obtain the concepts necessary to understand complex environmental issues of our time. (Intended for non-biology majors.).

BIOL 105L. Environmental Biology Laboratory. 1 Hour.

PR or CONC: BIOL 105. Field and laboratory exercises explore fundamental ecological concepts and environmental problems, such as biodiversity, pollution, and natural resource utilization.

BIOL 107. Biotechnology and Society. 3 Hours.

An overview of the use of biotechnology to solve agricultural, medical, and environmental problems. Bioethical concerns and societal impacts of the use of the technologies will be discussed.

BIOL 108. Drugs and the Body. 3 Hours.

An overview of how common prescription, street and over-the-counter drugs alter body functions. How the body absorbs and metabolizes various drugs, drug interactions, and the biology of addiction will also be presented.

BIOL 115. Principles of Biology. 3 Hours.

PR or CONC: (BIOL 115L or BIOL 116) with a minimum grade of C-. Presentation of basic principles of modern biology. First in a four-course, integrated sequence required of biology majors. Topics include ecology and evolution, organismal biology, and cellular/molecular biology.

BIOL 115L. Principles of Biology Laboratory. 1 Hour.

PR or CONC: BIOL 115 with a minimum grade of C-. Emphasizes proper understanding and use of the scientific method to design and perform biological experiments. Discipline-specific communication techniques, including scientific writing, also emphasized.

BIOL 117. Introductory Physiology. 3 Hours.

PR: ((BIOL 101 and BIOL 102 and (BIOL 101L or BIOL 103) and (BIOL 102L or BIOL 104)) or ((BIOL 115 and (BIOL 115L or BIOL 116)) with a minimum grade of C- in all and PR or CONC: BIOL 117L or BIOL 118. Continuation of BIOL 115 and 115L. The diversity of reproductive, developmental, functional, and integrative mechanisms in plants and animals.

BIOL 117L. Introductory Physiology Laboratory. 1 Hour.

PR: ((BIOL 101 and BIOL 102 and (BIOL 101L or BIOL 103) and (BIOL 102L or BIOL 104)) or ((BIOL 115 and (BIOL 115L or BIOL 116)) and PR or CONC: BIOL 117. Continuation of BIOL 115 and 115L. Utilizes themes from plant and animal physiology to enhance students' skills when applying the scientific method. Emphasis is placed on experimental design and discipline-specific communication methods.

BIOL 219. The Living Cell. 3 Hours.

PR: (BIOL 117 and (BIOL 117L or BIOL 118 or BIOL 240) and (CHEM 115 and CHEM 115L) with a minimum grade of C- in all and PR or CONC: BIOL 219L or BIOL 220. Third course in the core curriculum required for biology-related majors. It will expand on topics from BIOL 115/117, especially with regard to cell chemistry, bioenergetics, cell physiology and gene expression.

BIOL 219L. The Living Cell Laboratory. 1 Hour.

PR: BIOL 117 and (BIOL 117L or BIOL 118 or BIOL 240) and (CHEM 115 and CHEM 115L) with a minimum grade of C- in all and PR or CONC: BIOL 219. BIOL 219L is the laboratory that accompanies BIOL 219 (The Living Cell).

BIOL 221. Ecology and Evolution. 3 Hours.

PR: BIOL 117 and (BIOL 117L or BIOL 118) with a minimum grade of C- in all. Basic concepts in evolution and ecology including Darwin's theory of natural selection, modern population genetics, speciation, population growth and regulation, demography, community ecology, ecosystem dynamics, and human ecology.

BIOL 230. Human Anatomy and Physiology 1. 4 Hours.

PR: PSC sections require (BIOL 102 and BIOL 102L) with a minimum grade of C- or nursing major or consent, WVUIT sections require BIOL 111. The study of human body structure and function. Lecture emphasizes the integumentary, skeletal, muscular, and nervous systems, and special senses. Laboratory includes a complete cat dissection.

BIOL 231. Human Anatomy and Physiology 2. 4 Hours.

PR: PSC sections require a BIOL 230 with a minimum grade of C-, WVUIT sections require BIOL 230 with a minimum grade of D-. A continuation of BIOL 230. The following systems are thoroughly studied: endocrine, cardiovascular, lymphatic, respiratory, digestive, urinary, and reproductive. Laboratory work involves physiological investigations and dissections.

BIOL 490. Teaching Practicum. 1-3 Hours.

PR: Consent. (May be repeated for a maximum of 9 credit hours.) Teaching practice as a tutor or assistant.

BTEC 101. Introduction to Management. 3 Hours.

An introduction to principles and basic considerations of management of all levels, including aspects of management performance in areas of decision-making, planning, organizing, control, and ethics.

BTEC 102. Introduction to Business. 3 Hours.

A course designed to introduce students to the internal organization of business by surveying finance, marketing, ethics, law, and information management. Business structures, changes, will be analyzed. Emphasis will also be placed on the effect of global competition and international marketing.

BTEC 103. Personnel Management. 3 Hours.

Theory and practice and principles involved in the direction, coordination, and payrolls of personnel.

BTEC 104. Marketing. 3 Hours.

Principles and practice of the activities through which small business establishments direct the flow of goods and services to consumers.

BTEC 106. Document Solutions. 3 Hours.

An introduction to document generation through word processing and desktop publishing programs and the significance it serves to business applications. This course provides the skills and knowledge necessary to use features of these programs and apply them to business.

BTEC 107. Business Communications. 3 Hours.

PR: 6 hrs of English composition. A study of the vocabulary and techniques of business writing as applied to various forms of research and reporting. Correct English usage in modern business forms and letters.

BTEC 108. Business Organization and Management: Finance. 3 Hours.

A course introducing the student to an overview of business including the management of financing the various forms of business organization. Vocational guidance is given. Emphasis on proper terminology.

BTEC 109. Business Mathematics. 3 Hours.

A study of the fundamental processes, and of banking procedures, percentage, discount, interest, depreciation, investments, payrolls, and insurance.

BTEC 113. Spreadsheet Applications. 3 Hours.

Exploration of using spreadsheets as a problem-solving tool for business and industry. Design and create professional spreadsheets to collect, organize, and store data; basic formulas and built-in functions used to convert data into meaningful information such as budgets, data tables, and amortization schedules; formatting techniques, charts, and graphs, employed to enhance the visual presentation of data.

BTEC 114. Production, Quality, and Cost Control. 3 Hours.

Introduction to management decisions in a manufacturing environment. The course develops student understanding of the management task of designing and operating efficient productive systems, including planning and control, linear programming, budgets, goals, and objectives.

BTEC 115. General Insurance. 3 Hours.

Theory of risk and its application to insurance; principles underlying insurance- life, property, casualty, fire and surety. (Offered when sufficient demand is evident.).

BTEC 116. Real Estate. 3 Hours.

Principles and practices of real estate business; meets West Virginia Real Estate Commission requirements for licensing purposes. (Offered when sufficient demand is evident.).

BTEC 117. Human Resources Management. 3 Hours.

Consideration of problems faced by managers in managerial fields of industry, including wages, safety, medical and insurance programs, retirement programs, employee records, counseling, training, and other employment issues.

BTEC 118. Work Simplification, Time Study, Incentives. 3 Hours.

An introduction to processes of work simplification, time study principles and practices, incentives in relation to production, management and control.

BTEC 119. Managerial Decision-Making. 3 Hours.

An integrated study of forces which affect managerial decision-making, both internally and externally. An examination of organizational problems, development of alternate solutions, and implementation of an effective plan of action.

BTEC 120. Database Applications. 3 Hours.

Exploration of concepts and techniques utilized to build and maintain a database management system. Design and create relational databases to store, retrieve, organize, and analyze large amounts of data; queries, forms, and reports, generated to transform data into meaningful information for use in the world of business and industry.

BTEC 152. Principles of Management Information Systems. 3 Hours.

This course introduces students to the skills and knowledge required to effectively support stable and secure business environments using technology.

BTEC 200. Customer Service Relations. 3 Hours.

Students are introduced to customer service relation topics and methods for handling customer service issues in various industries. The elements of a systematic process for building the necessary customer service skills are explored.

BTEC 202. Professionalism. 3 Hours.

Prepares students for the workplace, providing career planning tools, expected behaviors, and soft skills essential for a successful career.

BTEC 205. Introduction to Online Marketing. 3 Hours.

An overview of social media strategies is presented to develop a social media market plan. Effective techniques to identify target markets on the social web and select the appropriate social media platforms to optimize marketing goals are investigated.

BTEC 210. Practicum in Business Technology: Spreadsheets and Database. 3 Hours.

A course designed for those interested in staying abreast of technological advances in the use of state-of-the-art equipment; encompasses practical application and use of computers for business as well as home use; highly recommended for those desiring hands-on experience.

BTEC 211. Introduction to Event Logistics. 3 Hours.

An introduction to the foundations of event planning and the significance it serves to business applications. Aspects of event planning and coordination, including site development, control and troubleshooting strategies, marketing and promotional tactics, and food operations. Students coordinate an event that takes place on campus.

BTEC 212. Business Law. 3 Hours.

A study of the fundamentals of law as applied to contracts, agency, negotiable instruments, sales, partnerships, corporations, insurance, and property.

BTEC 218. Medical Billing and Coding. 3 Hours.

An introduction to medical coding and billing. The course will cover a variety of medical specialties and issues involved with procedural coding. Insurance carriers, billing requirements and specific forms will be introduced and completed.

BTEC 220. Labor Relations. 3 Hours.

The development, structure, and functions of laborer and employer in their impact on society; essentials of contract negotiations and arbitration wage policies and problems, basic labor legislation.

BTEC 221. Advanced Real Estate. 3 Hours.

PR: BTEC 116. Continuation of BTEC 116. Financing techniques of real estate loans will be discussed, as well as the sources of real estate law, both cases and statutes, and includes basic real estate appraising. Meets West Virginia Real Estate Commission requirements for licensing purposes. (Offered when sufficient demand is evident.).

BTEC 222. Salesmanship. 3 Hours.

A study of techniques appropriate to personal selling, both retail and contact, as well as the psychological and human factors involved in sales. Students will conduct and present sales presentations.

BTEC 223. Advertising. 3 Hours.

Overview of advertising and sales promotion, development of sales strategies, promotional planning, media selection, and layout.

BTEC 225. Directed Experience. 3 Hours.

PR: Business technology major with sophomore standing. Students are placed in appropriate work sites in the community and surrounding area to participate in an on-the-job training experience.

BTEC 253. Intermediate Accounting. 3 Hours.

PR: ACCT 202. An advanced study of accounting theory and practice as applied to business firms, asset valuation, liabilities, and income determination.

BTEC 254. Intermediate Accounting. 3 Hours.

PR: BTEC 253. A continuation of BTEC 253.

BTEC 256. Managerial Accounting. 3 Hours.

PR: ACCT 202. The theory and practice of managerial accounting for small businesses.

BTEC 257. Income Tax Accounting. 3 Hours.

PR: ACCT 202 or consent. Preparation of income tax returns: gross income, capital gains, and losses, deductions, tax credits, and other tax regulations mainly pertaining to individuals.

BTEC 258. Income Tax Accounting. 3 Hours.

PR: BTEC 257 or consent. A continuation of BTEC 257. Preparation of income tax returns and study of tax regulations pertaining to partnerships, estate, trusts, and corporations. Also considered will be social Security taxes and federal gift tax.

BTEC 260. Computerized Accounting. 3 Hours.

This course covers pc-based accounting systems.

BTEC 293. Special Topics. 1-6 Hours.

Investigation of topics not covered in regularly scheduled courses.

BTEC 295. Entrepreneurship. 3 Hours.

An introduction to the entrepreneurial mindset and its significance to the economy and local communities. Students will develop resources to create and evaluate entrepreneurial opportunities.

BTEC 320. Personal Finance. 3 Hours.

Provides the tools and knowledge for personal short- and long-term financial success; includes the topics of financial planning, money management, income and asset protection, investments, and retirement planning.

BTEC 330. Corporate Finance. 3 Hours.

PR: ACCT 201 and ACCT 202. Investigation of corporate finance including capital structure analysis, valuation of financial assets, cost of capital, capital budgeting, and risk & security markets.

BTEC 340. Human Resource Management. 3 Hours.

A study of policies, practices, and systems that influence employees' behavior, attitudes, and performance.

BTEC 350. Advanced Computer Applications in Business. 4 Hours.

PR: BTEC 113 and CS 101 with a minimum grade of C- in each or consent. A study of advanced information concepts for managing business in a competitive environment. The internet, spreadsheet, and database applications will be utilized to research, analyze, and make decisions regarding operations.

BTEC 357. Essentials of Income Taxation. 3 Hours.

PR: ACCT 202 or consent. A study of federal income tax for individuals with a focus on exemptions, credits, deductions, gross income, capital gains and losses.

BTEC 360. Leadership and Human Behavior. 3 Hours.

A study of leadership in relation to employee motivation, decision- making, and team dynamics. Additional topics include ethics and responsibility, diversity, organizational control, and managing change in the workplace.

BTEC 365. Leaders Through History. 3 Hours.

Introduction of ideas and skills to prepare students for leadership positions in the community. whether this is in the workforce (small business, corporations), non-profit organizations, or any civic involvement in their community.

BTEC 370. Intermediate Accounting. 3 Hours.

PR: ACCT 201 and ACCT 202. A study of accounting theory including a review of the accounting cycle. Topics include income recognition, asset valuation, liabilities, current tax regulations, corporate ownership equity, and analysis of accounting data.

BTEC 380. Business Ethics. 3 Hours.

A study of ethical, cultural, and societal issues facing business and managers with regard to a global business environment.

BTEC 393. Special Topics. 1-6 Hours.

Investigation of topics not covered in regularly scheduled courses.

BTEC 405. Inbound Marketing. 3 Hours.

This course will cover the fundamentals of using inbound marketing. Students will apply the engagement strategies for a business throughout the semester via multiple business social media platforms.

BTEC 485. Senior Seminar. 4 Hours.

PR: BTEC 350 and BTEC 370. A capstone course in which the students will integrate the concepts and principles of the B.A.S. management emphasis through the process of case analysis and other methods.

BTEC 491. Professional Field Experience. 1-18 Hours.

PR: Consent. (May be repeated up to a maximum of 18 hours.) Prearranged experiential learning program, to be planned, supervised, and evaluated for credit by faculty and field supervisors. Involves temporary placement with public or private enterprise for professional competence development.

BTEC 493. Special Topics. 1-6 Hours.

PR: Consent. Investigation of topics not covered in regularly scheduled courses.

BUSA 101. Introduction to Business. 3 Hours.

An introduction to the contemporary business world, including international and small business, quality, ethics, and career preparation. The role of accounting, economics, finance, management, and marketing activities are investigated.

BUSA 293. Special Topics. 1-6 Hours.

PR: Consent. Investigation of topics not covered in regularly scheduled courses.

BUSA 310. Survey of Business Law. 3 Hours.

PR: Sophomore standing. Overview of business law discipline. Topics include laws and the court system, employment and labor law, business forms and capitalization, business competition law and business ethics.

BUSA 320. Survey of Management. 3 Hours.

PR: Sophomore standing. Overview of management discipline as a process involving planning, organizing, controlling and directing. An integrated view of management including organizational behavior is emphasized.

BUSA 330. Survey of Marketing. 3 Hours.

PR: Sophomore standing. Overview of the marketing discipline. Topics include the management of the product, communication, price and distribution variables as well as an introduction to buyer behavior and marketing research.

BUSA 340. Survey of Finance. 3 Hours.

PR: Sophomore standing. Overview of the finance discipline. Topics include financial statement analysis, risk, capital budgeting, investments, and security markets.

BUSA 490. Teaching Practicum. 1-3 Hours.

PR: Consent. Teaching practice as a tutor or assistant.

BUSA 491. Professional Field Experience. 1-18 Hours.

PR: Consent. (May be repeated up to a maximum of 18 hours.) Prearranged experiential learning program, to be planned, supervised, and evaluated for credit by faculty and field supervisors. Involves temporary placement with public or private enterprise for professional competence development.

BUSA 493. Special Topics. 1-6 Hours.

PR: Consent. Investigation of topics not covered in regularly scheduled courses.

BUSA 494. Seminar. 1-3 Hours.

PR: Consent. Presentation and discussion of topics of mutual concern to students and faculty.

BUSA 496. Senior Thesis. 1-3 Hours.

PR: Consent.

BUSA 498. Honors. 1-3 Hours.

PR: Students in Honors Program and consent by the honors director. Independent reading, study or research.

C&I 187. Introduction to Education. 3 Hours.

Current concepts underlying the educational system in the American society. This course gives the student experience in identifying the student's values, attitudes, and feelings with those of today's community and youth. Includes a required field experience.

CDFS 110. Families Across the Life Span. 3 Hours.

Explores the physical, psychological, and cognitive developmental changes of individuals who are functioning in family systems that change across the life-span.

CDFS 112. Introduction to Family Processes and Dynamics. 3 Hours.

Students will explore family processes and dynamics. Attention will be given to how family forms, functions, and expectations have changed across generations. Thus, students will study contemporary families in relation to how the concept of family has evolved over time.

CDFS 172. Health, Safety, & Nutrition in Early Childhood. 3 Hours.

Examines physical, nutritional, and safety needs that influence the growth and development of young children including non-medical-professional emergency training for the sick and injured leading to adult, child, and infant basic life support, CPR/AED and first aid certification.

CDFS 210. Introduction to Parenting. 3 Hours.

Introduction of terminology, descriptions, and explanations of the parental role and parent-child interactions. Emphasis on social and personal definitions of the parental role and on the problems and changes in parent-child relationships.

CDFS 211. Infant Development. 3 Hours.

Developmental characteristics and environmental effects on the child during the prenatal period and the first two years with implications for guidance and care, includes practical experience working with infants and toddlers.

CDFS 212. Development in Early and Middle Childhood. 3 Hours.

PR: CDFS 110 with a minimum grade of C-. An introductory course to physical, gross motor, fine motor, cognitive, language, social, and emotional development during the preschool and elementary years, includes field experience observing and assessing preschool- and elementary-aged children.

CHCR 170. The Basics of Childcare. 2 Hours.

Provides basic training required by the state of West Virginia for licensing or employment for all family childcare providers, center and school-age directors, program supervisors, site coordinators, and lead teachers in pre-school settings.

CHCR 171. Introduction to Early Childhood Education. 3 Hours.

Theories and practices related to the young child as well as observations of different learning facilities will be explored to help develop an understanding of the field and the teacher's role.

CHCR 272. Fundamentals of Early Childhood Education. 3 Hours.

Theories and practices related to young children's learning environments will be studied as well as the methods for implementation. Also included will be guidance and discipline as it relates to the learning environment.

CHCR 295. Practicum in Early Childhood Education. 3 Hours.

Presents supervised learning experiences in a specific setting at the primary level, preschool, day care, or Head Start. Materials covering field trips, ethnic theme unit planning and implementing, goal setting, and resume writing will be included.

CHEM 110. Introduction to Chemistry. 2 Hours.

PR or CONC: MATH 124 or higher with a minimum grade of C-. Required for students whose performance on ACT/SAT/placement examination indicates need for introductory work before enrolling in other chemistry courses. Elementary scientific terminology and concepts; simple chemical arithmetics; chemical symbols, formulae and equations; and mole concepts.

CHEM 111. Survey of Chemistry 1. 3 Hours.

PR or CONC: CHEM 111L, WVU sections require PR or CONC: MATH 124 or MATH 126 or higher Math class, WVUIT and PSC sections require MATH 122 with a minimum grade of C- or ML 10, or Math ACT Score of 19 or Math SAT Score of 460 or Math SAT (March 2016) Score of 500 or PR or CONC: MATH 124 or MATH 126, (including 126 A, B, or C) or MATH 129 or MATH 150 or MATH 153 or MATH 155. Designed primarily for students taking only one year of college chemistry. Atomic structure; chemical bonding; acids, bases, and salts; periodicity; properties of gases, liquids, and solids; stoichiometry; oxidation-reduction.

CHEM 111L. Survey of Chemistry 1 Laboratory. 1 Hour.

PR or CONC: CHEM 111. Survey of Chemistry 1 - CHEM 111 Laboratory.

CHEM 112. Survey of Chemistry 2. 3 Hours.

PR: WVU and WVUIT sections require CHEM 111 and CHEM 111L and PR or CONC: CHEM 112L, PSC sections require CHEM 111 and CHEM 111L and PR or CONC: CHEM 112L with a minimum grade of C- in all. Continuation of CHEM 111. Nuclear chemistry; air and water pollution; useful natural materials; consumer chemistry; introduction to organic and biochemistry.

CHEM 112L. Survey of Chemistry 2 Laboratory. 1 Hour.

PR: WVU and WVUIT sections require CHEM 111 and CHEM 111L and PR or CONC: CHEM 112, PSC sections require CHEM 111 and CHEM 111L and PR or CONC: CHEM 112 with a minimum grade of C- in all. Survey of Chemistry 2 - CHEM 112 Laboratory.

CHEM 115. Fundamentals of Chemistry 1. 3 Hours.

PR: Satisfactory ACT/SAT or placement exam performance, or WVU sections require CHEM 110 with a minimum grade of C- or MATH 129 or higher with a minimum grade of C-, PSC sections require MATH 124 or MATH 126 or PR or CONC: MATH 128 or higher with a minimum grade of C-, WVUIT sections require PR or CONC: MATH 126 or MATH 129, and PR or CONC: CHEM 115L. For students who need more than one year of college chemistry and quantitative relationships on which subsequent chemistry courses are built. Pre-requisite(s) and/or co-requisite(s) may differ on regional campuses.

CHEM 115L. Fundamentals of Chemistry 1 Laboratory. 1 Hour.

PR or CONC: CHEM 115. Fundamentals of Chemistry 1 - CHEM 115 Laboratory.

CHEM 116. Fundamentals of Chemistry 2. 3 Hours.

PR: CHEM 115 and CHEM 115L and PR or CONC: CHEM 116L with a minimum grade of C- in all. Continuation of CHEM 115 and CHEM 115L.

CHEM 116L. Fundamentals of Chemistry 2 Laboratory. 1 Hour.

PR or CONC: CHEM 116. Fundamentals of Chemistry 2 - CHEM 116 Laboratory.

CHEM 233. Organic Chemistry 1. 3 Hours.

PR: (CHEM 116 and CHEM 116L) or (CHEM 118 and CHEM 118L) and PR or CONC: (CHEM 233L or CHEM 235) with a minimum grade of C- in all. Basic principles of organic chemistry. Modern structural concepts, the effect of structure on physical and chemical properties, reactions and their mechanisms and application to syntheses.

CHEM 233L. Organic Chemistry 1 Laboratory. 1 Hour.

PR: CHEM 116 and CHEM 116L with a minimum grade of C- in each and PR or CONC: CHEM 233. Fundamental organic reactions and the preparation of organic compounds.

CHEM 234. Organic Chemistry 2. 3 Hours.

PR: CHEM 233 and (CHEM 233L or CHEM 235) and PR or CONC: (CHEM 234L or CHEM 236) with a minimum grade of C- in all. Continuation of CHEM 233 and 233L and the study of basic principles of organic chemistry. Modern structural concepts, the effect of structure on physical and chemical properties, reactions and their mechanisms and application to syntheses.

CHEM 234L. Organic Chemistry 2 Laboratory. 1 Hour.

PR: CHEM 233 and (CHEM 233L or CHEM 235) and PR or CONC: CHEM 234 with a minimum grade of C- in all. Continuation of CHEM 233L and its study of fundamental organic reactions and the preparation of organic compounds.

CIS 100. Introduction to Computer Information Systems. 3 Hours.

This course introduces the world of computers and Information Technology to offer students insight into college career options.

CIS 102. Introduction to Business Application Programming. 3 Hours.

A language independent course on computer program design and development using modern methods of analysis, design and development of program logic.

CIS 103. Computer System Development. 3 Hours.

PR: CIS 100. A study of established and evolving methodologies for the development of business oriented computer information systems. Students utilize a structures approach to defining, creating and implementing new systems.

CIS 106. PC Hardware Concepts. 3 Hours.

This course provides hand-on experience and skill development necessary to install, service, and support microcomputers. This course also covers A+ core competencies.

CIS 107. Operating Systems Concepts. 3 Hours.

PR: CIS 100. Introduction to the operating system of a modern general purpose digital computer. The student studies the organization of an operating system and its control language.

CIS 108. Data Communications. 1 Hour.

PR: CIS 100. Introduction to data communication fundamentals including communication media, protocols and network connectivity.

CIS 109. Networking Essentials. 3 Hours.

Provides introduction to computer network components, network architecture and data communication fundamentals. Covers essential competencies contained in Network + certification.

CIS 110. Data Management Concepts. 3 Hours.

PR: CIS 100. Provides hands-on introduction to modern database management software. The student designs file structures, performs queries, develops reports and develops database programs using a database language.

CIS 112. Intro to Networking and Security. 3 Hours.

The course is an introduction to concepts terms and basic skills required in the network and security courses offered in the CIS degree. The course emphasizes fundamentals of networking such as trouble shooting and best practices in personal and small business and security implementation.

CIS 113. Microsoft Application 1: WORD. 3 Hours.

PR: CIS 100. This course provides a survey of computer applications in business with emphasis on word processing.

CIS 114. Microsoft Application 2: EXCEL. 3 Hours.

PR: CIS 100 or CIS 106. The student continues the study of microcomputer applications acquiring further skills in the use of spread sheets such as Excel.

CIS 115. Microsoft Application 3: POWER POINT. 3 Hours.

PR: CIS 100 or CIS 106. The student continues the study of microcomputer applications acquiring further skills in presentation software such as PowerPoint.

CIS 116. Microsoft Application 4: Access. 3 Hours.

PR: CIS 100 or CIS 106. The student continues the study of microcomputer applications acquiring further skills in the use of database software such as Access.

CIS 117. Microsoft Application 5: OUTLOOK. 3 Hours.

PR: CIS 113 and CIS 114 and CIS 116. Provides hands-on experience and skills development necessary to perform basic and advanced functions of Microsoft Outlook and integrate with Microsoft applications.

CIS 118. Web Page Design. 3 Hours.

Provides hands-on experience and skills development necessary to perform basic and advanced functions in designing and developing web pages and an introduction to a variety of web software tools.

CIS 119. Web Page Development. 3 Hours.

Develops skills necessary to design and create complex web pages.

CIS 207. Operating Systems Concepts 2. 3 Hours.

PR: CIS 107. Operating system structures, process and thread handling, memory access, and storage structure will be covered including how files are organized and accessed by an operating system.

CIS 220. Microsoft Application 6. 3 Hours.

Provides hands-on experience and skills development necessary to perform project management using software such as MS Project.

CIS 221. Microsoft Network Administration 1. 3 Hours.

Provides skills necessary to install, configure, customize, network, integrate and troubleshoot Windows Workstation Operating System.

CIS 222. Microsoft Network Administration 2. 3 Hours.

PR: CIS 221. Provides skills necessary to perform day-to-day administration of Windows Server Operating System.

CIS 223. Microsoft Network Administration 3. 3 Hours.

PR: CIS 222. Provides skills necessary to install, configure, customize, network integrate, and trouble shoot Windows Server Operating System.

CIS 224. Microsoft Network Administration 4. 3 Hours.

PR: CIS 223. Provides skills necessary to install, configure, customize, network, integrate, and trouble shoot Windows Server Directory Services.

CIS 225. Internet Essentials 1. 3 Hours.

CIS 225. Internet Essentials 1. 3Hr. PR: CIS 106 and CIS 109. Provides skills necessary to install, configure, customize, and network and integrate Internet technologies. Covers competencies contained in the Inet + certification.

CIS 226. Photoshop Essentials. 3 Hours.

Provides skills necessary to manipulate raster and vector images using image management software such as Photoshop and Illustrator.

CIS 227. Supporting Internet Explorer. 3 Hours.

Provides skills necessary to plan, implement, and support Microsoft Internet Explorer using the administration kit on Windows Server Operating Systems.

CIS 228. E-Commerce. 3 Hours.

PR: CIS 118. Provides an understanding of the fundamentals of e-commerce. This includes designing and developing e-commerce applications.

CIS 229. Digital Video Essentials. 3 Hours.

Provides skills necessary to design, capture, edit, and author DVDs and digital video movies using digital video editing software such as Adobe Premier.

CIS 230. Programming Language 1: C. 3 Hours.

PR: CIS 100 and CS 110 and CS 111. An introduction to programming using C language syntax, functions, arrays, pointers, structures and files. Numerous exercises involving the use of C will be assigned.

CIS 232. Visual Basic Programming 1. 3 Hours.

Develop intermediate-level skills to design, develop, write, and debug programs using Visual Basic.

CIS 233. Visual Basic Programming 2. 3 Hours.

Develop advanced -level skills to design, develop, write, and debug programs using Visual Basic.

CIS 234. Computer Graphics-Illustrator. 3 Hours.

Provides skills necessary to create illustrations and graphics using Adobe Illustrator. Course covers drawing, typography, paths effects, layers, masks, blends, patterns, and color.

CIS 236. Introduction to Cyber Security. 3 Hours.

this course gives students an introduction to computer and network security procedures. A hands-on approach is used to cover securing network services, devices, traffic, and responding to network breaches.

CIS 237. Linux Operating Systems. 3 Hours.

This course introduces the student to Linux operating system. Topics include installation, configuration, and management of Linux in a network setting. Material covered will allow students to take the CompTIA Linux+ certification exam.

CIS 238. Graphic Digital Design. 3 Hours.

This course covers the Adobe Suite applications of Photoshop, Illustrator and In-Design. The student acquires a working knowledge of the applications through a project-based approach and creates a portfolio project.

CIS 240. System Development Project. 3 Hours.

PR: CIS 100 and CIS 103. An independent study requiring the student to complete all phases of a computer oriented project from system design to implementation on a computer.

CIS 241. Networking Fundamentals. 4 Hours.

Topics include OSI model, network topologies, IP addressing, networking components, and basic network designs. (Lab fee required.) (Course is part of Cisco Academy.)

CIS 242. Routing Theory and Router Technologies. 4 Hours.

Topics include beginning router configurations, routing and routing protocols, and LAN switching. (Lab fee required.) (Course is part of Cisco Academy.)

CIS 243. Advanced Routing and Switching. 4 Hours.

Topics include advanced router configuration, LAN switching, network management, and advanced network design. (Lab fee required.) (Course is part of Cisco Academy.)

CIS 244. Project Based Learning. 4 Hours.

Advanced network design projects and advanced network management projects. (Lab fee required.) (Course is part of Cisco Academy.)

CIS 245. Applied Programming. 3 Hours.

This course will provide students a comprehensive understanding and application of programming methods through practical projects.

CIS 248. System Analysis and Design. 3 Hours.

Students learn how to translate business requirements into information systems that support a company's short and long-term objectives. CIS students apply analytical and problem-solving skills to business needs and are introduced to traditional structured analysis, object-oriented concepts, and agile methods.

CIS 250. Directed Computer Experience 1. 3 Hours.

PR: CIS 100 and CIS 103. Students are placed into practical working situations where they are involved in problem resolution, programming, system design or other areas as deemed appropriate.

CIS 251. Directed Computer Experience 2. 2 Hours.

PR: CIS 250. A continuation of CIS 250 with emphasis on the independent solution of problems by the student.

CIS 252. Database Design 1. 3 Hours.

The course provides instruction beyond a general understanding of database structure and data types for the CIS student. The student will create database objects based on requirements and business rules. It emphasizes the connection of business processes and database for business reporting and analytics.

CIS 255. Computer Graphic Production. 3 Hours.

A course on the mechanics of the Corel Draw program and its application in desktop publishing.

CIS 293. Special Topics. 1-6 Hours.

PR: Consent. Investigation of topics not covered in regularly scheduled courses.

CIS 318. Project Management. 3 Hours.

The course is designed to provide the CIS student with knowledge and skills to manage an Information Technology project. The student will not only use tools for assessing the progress of a project, he or she will apply key elements of project management such as: Gantt charts, rough order of magnitude (ROM), Program Evaluation and Review Technique (PERT) as well.

CIS 327. Cloud Computing. 3 Hours.

PR: CIS 112 or consent. CIS students will analyze software as a service (SaaS), platform as a service (PaaS), and infrastructure as a service (IaaS) within the constructs of cost, security, and business needs. Virtualization, cloud security, and managing cloud services are covered as an integral part of the final determination as to whether the service is a benefit to a business enterprise.

CIS 338. Computer and Network Forensics. 3 Hours.

PR: CIS 236 with a minimum grade of C-. The course provides the CIS student with skills the tools, techniques, and methods to perform computer forensics and investigation. An overview of performing forensics in the Windows, Linux, and Macintosh operating systems is covered. The student will be exposed to emerging technologies and future directions in the field in the creation of legally defensible documentation and chain of custody.

CIS 367. Applied Programming 2. 3 Hours.

PR: CIS 245 with a minimum grade of C-. The course applies object oriented design (OOD) to the study of data structures and algorithms such as lists, stacks, queues, trees, recursion and sorting in an object oriented programming language. The CIS student will apply programming logic and advanced object oriented programming techniques to create a programmatic business solution.

CIS 393. Special Topics. 1-6 Hours.**CIS 417. Database Design 2. 3 Hours.**

PR: CIS 252 with a minimum grade of C-. This course provides the CIS student the skills required to continue study in the CIS major as it applies to data mining and business intelligence and advanced programming. The course identifies and describes the key concepts, tips, techniques, and best practices needed to take full advantage of stored procedures using SQL Server's native Transact-SQL and .NET compatible programming languages.

CIS 438. Network Defense. 3 Hours.

PR: CIS 236 with a minimum grade of C-. This course provides the CIS student with skills in network defense and penetration testing. The student learns to apply creativity in the interpretation and analysis of results to determine the optimal next steps in defending a network.

CIS 440. Cyber Ethics. 3 Hours.

PR: CIS 236 or BTEC 380 with a grade of C- or better. The course introduces key ideas in moral theory and professionalism to explore the current topics in computer ethics. CIS students apply critical thinking skills in the convergence of technical solutions with moral and social implications affecting business needs and personal information in communications and social networks.

CIS 488. BAS CIS Capstone. 3 Hours.

PR: CIS 489 with a minimum grade of C- and nine (9) hours in upper level electives in the CIS major. The BAS CIS student will demonstrate the ability to integrate skills and knowledge acquired in Computer Information System courses. The individual project and its presentation demonstrate critical thinking and reasoning in the computer information system technologies.

CIS 489. System Analysis & Design 2. 3 Hours.

PR: CIS 248 and CIS 252 with a minimum grade of C- in each. The CIS student will apply software, system and database knowledge from previous course work to create and update detailed technical documentation required in an information technology project. These may include Concept of Operations, Requirement, Database Design Documentation as well as System or Programming design documentation based on the IEEE standard used in both the private and public sector.

CIS 491. Professional Field Experience. 1-18 Hours.

PR: Consent. (May be repeated up to a maximum of 18 hours.) Prearranged experiential learning program, to be planned, supervised, and evaluated for credit by faculty and field supervisors. Involves temporary placement with public or private enterprise for professional competence development.

CJ 101. Introduction to Criminal Justice. 3 Hours.

This course examines the history, structure, functions and issues related to criminal law, law enforcement, criminal adjudication, and corrections. The course also examines criminological theories and research, and the juvenile justice system. (Equivalent to SOCA 234).

CJ 111. Police Operations. 3 Hours.

The student will be introduced to the day-to-day duties of a police officer. Emphasis will be placed on community and human relations, patrol and traffic functions, order maintenance, report writing, investigations, communications, interviewing, search, and seizure, and arrest. Police stress and survival skills will also be discussed.

CJ 201. Traffic Law Enforcement. 3 Hours.

PR: CJ 101. The role of the police officer in traffic control and enforcement is examined in detail. Among the topics studied will be West Virginia traffic law, accident investigation and reconstruction, traffic education, and the interrelations of local, state, and federal agencies responsible for traffic functions.

CJ 202. Principles of Criminal Law. 3 Hours.

This course focuses on the history, scope, purpose, and definition of the criminal law. Topics include crimes against person, crimes against property, other offenses, interpretation of statutes, legal definitions of specific criminal offenses, rights of the accused, pre-trial procedures, the criminal trial, sentencing, and the appeal process.

CJ 203. West Virginia Criminal Procedure. 3 Hours.

This course introduces the student to state rules and laws of procedure that are used to prosecute criminal defendants. Topics include rules and laws for prosecution in municipal, magistrate, and circuit courts.

CJ 204. Police Defense Tactics. 3 Hours.

The student will be exposed to the methods of physical protection, including the techniques of baton use, disarmament, and defense techniques.

CJ 206. Introduction to Corrections. 3 Hours.

A survey of the current correctional process in America which includes the origin and legal procedures of the present system and the effects of the system on the individuals as well as on our society. Special emphasis is given to current theories of rehabilitation in the institution and in probation and parole.

CJ 209. Firearms. 3 Hours.

PR: CJ 101. This course addresses safety precautions, legal provisions, moral aspects, principles of decision shooting, and restrictions in the use of firearms. Nomenclature and the firing process of the sidearm and shotgun will be demonstrated.

CJ 210. Advanced Firearms. 3 Hours.

PR: CJ 209. A transitional training from revolver to semi-automatic handgun, advanced tactical shotgun and law enforcement rifle, including low- light level training. Course addresses safety precautions, legal provisions, moral aspects, principles of decision shooting, and restrictions in the use of firearms. Nomenclature and the firing processes will be demonstrated.

CJ 212. Abnormal Behavior & Crisis Intervention. 3 Hours.

PR: CJ 101. A study of the recognition and handling of abnormal persons with emphasis on those mental conditions most encountered by the criminal justice practitioner. Methods of crisis intervention, basic conflict management, and referral and diversion will also be discussed.

CJ 215. Criminal Justice System. 3 Hours.

PR: CJ 101. Introduces students to the agencies that form state criminal justice systems. Topics include law enforcement agencies, criminal courts, municipal courts, juvenile justice institutions, and corrections facilities.

CJ 220. Juvenile Justice Process. 3 Hours.

PR: CJ 101. Definitions of delinquent behavior; contributing social problems; adolescence as a subculture; the adjudication process for juveniles; philosophy and practice; treatment procedures.

CJ 225. Criminal Procedure and Constitutional Law. 3 Hours.

PR: CJ 101. Constitutional and procedural issues relating to search and seizure, arrest, confinement; the admissibility and exclusion of evidence; types and degrees of evidence; discussion of court decisions interpreting the guarantees found in the Bill of Rights.

CJ 230. Probation and Parole Operations. 3 Hours.

PR: CJ 101. Daily activities in probation and parole. Emphasis on supervision and surveillance techniques, community risk assessment and classification, revocation and pre-sentence report investigations, and effective use of community resources.

CJ 233. Juvenile Justice. 3 Hours.

PR: CJ 101 or SOCA 234. The history, philosophy, and processes of the juvenile justice system are studied. The juvenile court's jurisdiction over juvenile delinquency, status offenses, and abuse and neglect is examined. Topics include juvenile rights, types of juvenile correctional institutions and community based correctional alternatives for juveniles.

CJ 236. Criminal Investigation. 3 Hours.

PR: CJ 101. This course will survey the fundamental techniques of criminal investigation. Students will be exposed to the history of criminal investigation and criminalistics, interviewing and interrogation, physical evidence, crime scene procedures, crime analysis, investigation techniques, report writing and case preparation, and courtroom testimony.

CJ 240. Correctional Counseling. 3 Hours.

A survey of contemporary counseling interventions for juvenile and adult offenders with an emphasis on cognitive and behavior modifications strategies. Other counseling models will also be examined.

CJ 242. Contemporary Policing. 3 Hours.

This class will examine and evaluate the issues faced by law enforcement in present society. The student will learn and understand the problems that exist, how they came to be, and analyze possible solutions to combat the issues.

CJ 245. Adjudication Process. 3 Hours.

PR: CJ 101. Role and structure of prosecution, public defense, and the courts; basic elements of the substantive criminal law; procedural law and its relation to constitutional guarantees.

CJ 250. Diversity in Law Enforcement. 3 Hours.

This course provides an in-depth examination of a multicultural society and examines the issues of race, racism, and systemic racism and how it impacts the relationship between law enforcement and the communities they serve. The information presented provides practical ways to discern, communicate, and respond effectively to challenging situations.

CJ 255. Analysis of Correctional Operations. 3 Hours.

PR: CJ 206. Problems of management of the correctional process; programming, security, information systems, reports, case management, evaluation process; custody and discipline as they relate to rehabilitative efforts, community adjustment facilities; problems of probation and parole.

CJ 280. Victimology. 3 Hours.

A focused examination of the victims of crime. Concentration on the psychological and emotional harm experienced by victims and victim services and programs. Analysis of domestic violence, victim compensation, rights, and treatment throughout the criminal justice process.

CJ 285. Criminal Justice Technical Writing. 3 Hours.

PR: ENGL 101 and CJ 101. This course will focus on grammar and writing skills and transition into technical writing. Students will engage in such tasks as drafting resumes, learning APA style, writing criminal justice reports, and engaging in legal research/analysis/writing.

CJ 293. Special Topics. 1-6 Hours.

PR: Consent. Investigation of topics not covered in regularly scheduled courses.

CJ 295. Field Practicum. 3 Hours.

PR: Sophomore status and a 2.0 GPA or higher. A supervised professional study conducted in a criminal justice field.

CJ 301. White Collar and Economic Crime. 3 Hours.

PR: CJ 101. Overview of white collar and economic crime in America including an examination of the extent of economic crime, law enforcement effectiveness, theories of causation, and methods of prevention. Also discussing the effect of the Internet on white collar and economic crime.

CJ 302. Terrorism. 3 Hours.

An examination of terrorism both domestic and foreign including its causes and trends. Also examining selected current cases, explanatory theories, methods of prevention or containment, and the effectiveness of law enforcement efforts.

CJ 310. Law Enforcement Administration. 3 Hours.

This course introduces the history of law enforcement in the United States, the roles of law enforcement officers, the purpose of policing, police conduct, police administration, and community relations.

CJ 315. Criminal Evidence. 3 Hours.

PR: CJ 225 or consent. Study of the rules of evidence and admissibility. Students will develop the ability to apply those rules in the collection and presentation of evidence in a court of law. Forensic requirements, statutory law, and other related issues will be emphasized.

CJ 316. Community Based Corrections. 3 Hours.

The history, philosophy, types and current trends in community based corrections is studied. Specifically, probation, parole, diversion programs, and intermediate sanctions including house arrest, community service, restitution, halfway houses, and temporary release are examined.

CJ 320. Courts and Judicial Systems. 3 Hours.

This course focuses on the structure and philosophy of the court system with special emphasis on court procedures, constitutional guarantees, the trial process, the role of judges, prosecutors, defense attorneys and juries.

CJ 324. Drugs, Crime and Society. 3 Hours.

PR: PSC sections require CJ 101, WVUIT sections require CJ 101 and SOC 101. Examines the fundamentals of mood-altering chemicals and their effects on the individual, the criminal justice system, and society. Addresses the current US policy regarding substance abuse, investigation, prevention, treatment, criminality, and education.

CJ 325. The Role of Women in Criminal Justice. 3 Hours.

Examination of how the roles of women in criminal justice have changed over time. Focus will be placed on women as practitioners, victims, and offenders.

CJ 380. Victimology. 3 Hours.

PR: ENGL 101. A focused examination on the victims of crime. Concentration on the psychological and emotional harm experienced by victims, victim services and programs. Analysis of victim compensation, victim rights, domestic violence, and victims' treatment throughout the criminal justice process. An overview of history and theory.

CJ 393. Special Topics. 1-6 Hours.

PR: Consent. Investigation of topics not covered in regularly scheduled courses.

CJ 401. Research Methods in Criminal Justice. 3 Hours.

PR: STAT 111 or STAT 211. A general introduction to the process of research emphasizing research design, techniques of data collection including electronic methods, analysis and interpretation of research results as applied to the study of criminal justice.

CJ 410. Criminal Investigations. 3 Hours.

This course focuses on that aspect of the American legal and judicial system associated with the investigative processes as conducted by law enforcement and forensic science. Included will be an examination of the role of crime scene investigation, witness interviewing, and the investigators relationship with the prosecution.

CJ 415. Forensic Techniques. 3 Hours.

This class will explore the scientific disciplines utilized to detect trace evidence at a crime scene. Explain (and demonstrate) the methods used for collection of various types of evidence. The student will learn the importance of the chain of custody from crime scene to the court room.

CJ 455. Ethics/Criminal Justice System. 3 Hours.

PR: CJ 101 and CJ 410 or consent. Focus on the ethical issues faced by individuals as citizens and criminal justice professionals. The course will assist students in clarifying their values and in establishing a framework for ethical decision making. Students will examine ethical issues, which relates to a wide variety of concerns, and a variety of professional ethical codes.

CJ 460. Hate Crimes. 3 Hours.

Examines the response to hate crimes from the various sub-components of the criminal justice systems, i.e., law enforcement, courts, and corrections. Organizational policies, statutes, court decisions, and the social response to hate crimes will be evaluated.

CJ 461. Current Issues/Criminal Justice. 3 Hours.

PR: CJ 101 and CJ 410 or consent. Focus on the current issues facing criminal justice including those related to prevention of crime, law enforcement, corrections, institutional reform, and public opinion. Examination of recent research, emerging trends and policy.

CJ 480. Hate Crimes: Systems Approach. 3 Hours.

PR: Admission to any BAS or RBA program. Examines the response to hate crimes from the various sub-components of the criminal justice system, i.e., law enforcement, courts, and corrections. Organizational policies, statutes, court decisions, and the social response to hate crimes will be evaluated.

CJ 485. Senior Seminar-Capstone. 3 Hours.

PR: Senior standing and criminal justice major. A senior capstone course. Course allows student to consider the integration of theoretical and methodological issues. Focus will also be given to career or graduate placement.

CJ 491. Professional Field Experience. 1-18 Hours.

PR: Consent. (May be repeated up to a maximum of 18 hours.) Prearranged experiential learning program, to be planned, supervised, and evaluated for credit by faculty and field supervisors. Involves temporary placement with public or private enterprise for professional competence development.

CJ 493. Special Topics. 1-6 Hours.

PR: Consent. Investigation of topics not covered in regularly scheduled courses.

CJ 495. Independent Study. 1-6 Hours.

Faculty-supervised study of topics not available through regular course offerings.

COMM 104. Fundamentals of Public Communication. 3 Hours.

Explores the context of public communication through the rhetorical canons of invention, arrangement, style, delivery, and memory. Emphasizes the listening, critical thinking, logical reasoning, and ethical skills necessary for the creation, delivery, and interpretation of appropriate and effective persuasive appeals.

COMM 306. Organizational Communication. 3 Hours.

Explores fundamental organizational communication perspectives, theories, and concepts in a wide range of contexts, with a focus on translating theories and concepts into organizational practices. Addresses appropriate and effective communication strategies to solve contemporary organizational issues.

COMM 308. Nonverbal Communication. 3 Hours.

Examines the effects of nonverbal behavior on interpersonal and organizational relationships as well as environmental contexts. Explores specific nonverbal codes such as touch, space, time, scent, body movement, and personal appearance, among others.

COUN 201. Foundations of Mental Health Intervention. 3 Hours.

Introduction to mental health and mental disorders, including substance use and substance use disorders, and associated interventions across the lifespan. Emphasis on the evolution and composition of the modern mental health system with a survey of interventions from prevention to psychopharmacology.

COUN 230. Life Choices. 3 Hours.

Students will examine lifestyle choices typically dictated by unconscious customs rather than research. Covers areas of attitude, relationships, physical lifestyle, health and spirituality. The class consists of lectures and required student participation.

COUN 240. Introduction to Addiction Studies. 3 Hours.

Overview of core concepts related to substance use and substance use disorders. Topics include the history of drug use/addiction, effects on societal members, pharmacology of common psychoactive drugs, theories of addiction, treatment approaches, mutual support, recovery and relapse.

COUN 330. Addiction Screening & Assessment. 3 Hours.

PR: COUN 240 with a minimum grade of C-. Skills, techniques and tools necessary for preliminary and in-depth evaluation for the presence of substance use disorders. Emphasis on establishing rapport, interviewing skills, diagnostic criteria, recognition of common co-occurring disorders, treatment planning and clinical writing.

COUN 340. Counseling Techniques. 3 Hours.

PR: COUN 240 with a minimum grade of C-. Overview of basic individual and group helping skills with a focus on the helping relationship, therapeutic dialogue, the stages and tasks of helping, and motivational techniques. Introduction to behavioral addictions and their connection to substance use disorders. Exploration of personal characteristics essential to working in mental health and addiction settings.

COUN 350. Families & Addiction. 3 Hours.

PR: COUN 240 with a minimum grade of C-. Overview of the impact addiction has on the family unit and the process of family recovery. Emphasis on the family as a system, attachment, adaptation, enabling and enmeshment, and techniques to support family healing.

CPE 271. Introduction to Digital Logic Design. 3 Hours.

PR: MATH 156. Introduction to the design of digital systems. Topics include number systems, coding, Boolean and switching algebra, minimization of logic, analysis and design of combinational and sequential logic circuits.

CRIM 232. Criminology. 3 Hours.

PR: SOC 101. Exploration of various theories of criminal behavior; emphasis on a critical study of the criminal justice system and efforts to reform the penal system.

CRIM 302. Deviant Behavior. 3 Hours.

PR: CRIM 232 and (CRIM 234 or CJ 101) or consent. Examination of the processes by which deviance is defined in society, and the methods of social control attempted. Provides a critical understanding of society from the perspective of those defined as outsiders-criminals, addicts, etc.

CS 101. Intro to Computer Applications. 4 Hours.

Introduction to spreadsheets and databases for problem-solving in disciplines such as math, science, engineering, business, social sciences, behavioral sciences, and environment: using computer applications to create technical reports and presentations.

CS 455. Computer Architecture. 3 Hours.

PR: CPE 271. Computer structure; emphasis on implications for software design; evolution of computers; elementary digital logic; CPU structures; memory and I/O structures; pipelining and memory management; introduction to parallel and high-level architectures. (3 hr. lec.).

CYBE 465. Cybersecurity Principles and Practice. 3 Hours.

PR: WVU sections require CS 350, PSC sections require CS 350 with a minimum grade of C-, and WVUIT sections require CS 321. Covers the principles and practice of cybersecurity. Addresses encryption; malicious code, spyware, and spam; authentication and access control; database security; operating system security; network security; and social engineering. Provides comprehensive overview of the cybersecurity threats, technologies for information assurance, and engineering approaches to build and maintain secure cyber space.

ECON 201. Principles of Microeconomics. 3 Hours.

Introductory microeconomics analysis. Competitive behavior of firms, price determination, efficiency in production and equity in distribution. Prerequisite(s) and/or co-requisite(s) may differ on regional campuses.

ECON 202. Principles of Macroeconomics. 3 Hours.

PR: WVU sections require ECON 201 or ARE 150 with a minimum grade of C-, WVUIT sections require ECON 201 with a minimum grade of C-. Introductory macroeconomics analysis, prerequisites are not enforced at WVUIT and Potomac State campuses. Aggregate demand and supply, saving, investment, the level of employment and national income determination, monetary and fiscal policy.

ECON 225. Elementary Business and Economics Statistics. 3 Hours.

PR: MATH 122 or MATH 123 or MATH 124 or MATH 126 or MATH 129 or MATH 153 with a minimum grade of C- or MATH 150 or MATH 154 or MATH 155 or MATH 156 with a minimum grade of D-. Basic concepts of statistical models, distributions, probability, random variables, tests of hypotheses, confidence intervals, regression and correlation with emphasis on business and economics examples. (Not open to students who have completed STAT 215.)

ECON 494. Seminar. 1-3 Hours.

PR: Consent. Presentation and discussion of topics of mutual concern to students and faculty.

EDP 101. Learning Strategies for Academic Success. 3 Hours.

The purpose of the course is to help students develop active learning strategies that are research-based and appropriate for the college curriculum that will enable them to achieve academic success.

EDP 283. Human Development and Learning. 3 Hours.

Emphasis on development, standardized measurement, and classroom management.

EDP 285. Human Development and Learning. 3 Hours.

Emphasizes competencies in applying principles of learning and measurement in classroom instruction.

EDUC 100. Education Colloquium. 1 Hour.

Components of and requirements for the teacher preparation program, including specializations, professional organizations, requirements for admission to the major, avenues to program completion, and requirements for work with children or youth.

EDUC 200. Professional Inquiry in Education. 3 Hours.

PR: ENGL 101 and ENGL 102. The course provides an examination of issues that cut across the field of teaching and the institution of public education. This course also focuses on developing higher-level skills in written communication.

EDUC 293. Special Topics. 1-6 Hours.

PR: Consent. Investigation of topics not covered in regularly scheduled courses.

EE 221. Introduction to Electrical Engineering. 3 Hours.

PR: WVU and PSC sections require MATH 156 and PHYS 111, WVUIT sections require MATH 156. Electrical engineering units, circuit elements, circuit laws, measurement principles, mesh and node equations, network theorems, operational amplifier circuits, energy storage elements, sinusoids and phasors, sinusoidal steady state analysis, average and RMS values, complex power.

EE 221L. Introduction to Electrical Engineering Laboratory. 1 Hour.

PR or CONC: EE 221. Design and experimental exercises basic electrical circuits. Use of the digital computer to solve circuit problems.

EE 223. Electrical Circuits. 3 Hours.

PR: WVU and PSC sections require EE 221 and EE 221L and PHYS 112 and MATH 251 all with a minimum grade of C-, WVUIT sections require EE 221 and EE 221L and MATH 251 all with a minimum grade of C-. Time response of RC and RL circuits, unit step response, second order circuits, poly-phase systems, mutual inductance, complex frequency, network frequency response, two-port networks and transformers. Fourier methods and Laplace Transforms.

EE 223L. Electrical Circuits Laboratory. 1 Hour.

PR or CONC: EE 223. Design and experimental exercises in circuits. Transient circuits, steady state AC circuits, frequency response of networks. Use of digital computer to solve circuit problems.

ENGL 1C1. Introduction to Composition and Rhetoric. 3 Hours.

Studies the logical, rhetorical, and linguistic structures of expository prose; develops strategies for analyzing purposes, audiences, and conventions; emphasizes processes for drafting, revising, and editing. Required of all bachelor's degree candidates unless equivalent transfer credit or portfolio credit applies. Qualified students may complete ENGL 103 in place of ENGL 101 and 102. Co-requisites will differ at WVUIT and PSC.

ENGL 1C2. Composition, Rhetoric, and Research. 3 Hours.

PR: ENGL 101 or equiv. Builds on the writing abilities earned in English 101 (or the equivalent). Focuses on the research process, argumentation, and critical inquiry; emphasizes structures, language, documentation, and formats appropriate for specific audiences and purposes. Required of all bachelor's degree candidates unless equivalent transfer credit or portfolio credit applies.

ENGL 100. English 100 Writing Studio. 2 Hours.

PR: Consent. Additional support of basic reading and writing skills for students taking ENGL 101. Enables students to have the reading, writing, critical thinking and language skills necessary to function effectively and succeed in pursuit of their degrees and in the global economy.

ENGL 101. Introduction to Composition and Rhetoric. 3 Hours.

PR: Satisfactory ACT/SAT score. Studies the logical, rhetorical, and linguistic structures of expository prose; develops strategies for analyzing purposes, audiences, and conventions; emphasizes processes for drafting, revising, and editing. Required of all bachelor's degree candidates unless equivalent transfer credit or portfolio credit applies. Qualified students may complete ENGL 103 in place of ENGL 101 and 102. Co-requisites will differ at WVUIT and PSC.

ENGL 102. Composition, Rhetoric, and Research. 3 Hours.

PR: ENGL 101 or ENGL 1C1 or equiv. Builds on the writing abilities earned in English 101 (or ENGL 1C1 or the equivalent). Focuses on the research process, argumentation, and critical inquiry; emphasizes structures, language, documentation, and formats appropriate for specific audiences and purposes. Required of all bachelor's degree candidates unless equivalent transfer credit or portfolio credit applies.

ENGL 111. Introduction to Creative Writing. 3 Hours.

Instruction in reading and writing fiction, nonfiction and poetry in order to enhance creative writing skills.

ENGL 156. Literature of Native America. 3 Hours.

A historical survey of Native American prose, poetry, song, and story from the beginning to the present.

ENGL 171. Literature of Science and Nature. 3 Hours.

Analyzes the representation of science and nature in literature and film across historical periods and genres.

ENGL 185. Technical Writing and Reporting. 3 Hours.

This course is designed to develop skill in presenting and reporting scientific and technical information in a simple, clear, and factual manner. Designed for students in career programs.

ENGL 200. Foundations of Literary Study. 3 Hours.

Study and practice of the analytical, research, and writing skills fundamental to literary studies.

ENGL 212. Creative Writing: Fiction. 3 Hours.

An open enrollment introduction to the writing of fiction.

ENGL 213. Creative Writing: Poetry. 3 Hours.

An open enrollment introduction to the writing of poetry; practice in the basics of image, metaphor, line, form, sound and voice.

ENGL 214. Creative Writing: Non-Fiction. 3 Hours.

Introductory course in the writing of non-fiction.

ENGL 226. Non-Western World Literature. 3 Hours.

Selected readings in non-Western world literature, ancient and modern.

ENGL 230. Film Studies. 3 Hours.

Topics in the study of film, or film and literature, in a historical, theoretical and/or cultural context.

ENGL 232. Poetry. 3 Hours.

Appreciation and enjoyment of poems through critical and analytical reading. Studies in the various types of poetry, and of the language, imagery, and techniques of poetic expression.

ENGL 233. The Short Story. 3 Hours.

The short story's structure, history, and contemporary forms.

ENGL 236. The Bible as Literature. 3 Hours.

Analysis of the themes, topics and literary genres of the Old and New Testaments. Issues to be discussed include the unity of the text, the status of authorship, translation, and the depiction of God.

ENGL 241. American Literature 1. 3 Hours.

A historical introduction and survey from its beginnings to the mid-nineteenth century.

ENGL 242. American Literature 2. 3 Hours.

A historical introduction and survey from the mid-nineteenth century to the present.

ENGL 252. Appalachian Fiction. 3 Hours.

Reading of short stories, novels, and other narratives by Appalachian authors.

ENGL 254. African American Literature. 3 Hours.

Studies in the literature of African American authors, 1845 to the present.

ENGL 255. Multiethnic Literature. 3 Hours.

This course examines literature by Americans of diverse ethnicities including, but not limited to, Asian Americans, Latinos, Native Americans, African Americans, and European Americans of various class/religious/regional backgrounds.

ENGL 257. Science Fiction and Fantasy. 3 Hours.

A study of the history and nature of science fiction from H. G. Wells to the present, with special attention to features of prose narration.

ENGL 258. Popular American Culture. 3 Hours.

A survey of modern popular American culture from 1940 to the present, with special emphasis on popular literature, music, television, movies, radio in its golden age, and comic books.

ENGL 261. British Literature 1. 3 Hours.

A historical introduction and survey from the Middle Ages through the eighteenth century.

ENGL 262. British Literature 2. 3 Hours.

A historical introduction and survey from the late eighteenth century to the present.

ENGL 263. Shakespeare 1. 3 Hours.

Several of Shakespeare's most important plays.

ENGL 272. Modern Literature. 3 Hours.

British and American poetry, drama, and fiction from 1900 to 1960.

ENGL 285. Images of Women in Literature. 3 Hours.

Representative literary works studied against a backdrop of social and historical documents to examine the effect of images of women in literature on the self-image of women today.

ENGL 286. World Fairy Tales. 3 Hours.

This course explores fairy tales as world literature. Students will examine the history of the fairy tale and explore how stories are told across the world. Stories from America, Europe, Asia, Africa, and from other under-represented groups will appear.

ENGL 318. Topics in Creative Writing. 3 Hours.

PR: (ENGL 212 or ENGL 213 or ENGL 214) with a minimum grade of C-. Advanced work in creative writing; course content changes with genre: fiction, poetry, non-fiction. (May be repeated for a maximum of 9 hours.).

ENGL 331. Topics in Genre. 3 Hours.

This variable-topic course will trace formal and thematic conventions in poetry, drama, prose, fiction, and/or nonfiction.

ENGL 343. American Poetry. 3 Hours.

Major American poets of the nineteenth and twentieth centuries.

ENGL 352. Topics in Appalachian Studies. 3 Hours.

Studies of authors, genres, themes, or topics in Appalachian literature.

ENGL 383. Introduction to Cultural Studies. 3 Hours.

Students will explore the ways in which we are all simultaneously users of and used by culture, and the ways in which cultural practices influence how we think, feel, and act in everyday life.

ENGL 387. Topics in Women's Literature. 3 Hours.

Syllabus will vary per term. Topics include women writers outside of Great Britain and the United States; comparative women writers; women's writing on a particular theme or topic.

ENGR 101. Engineering Problem Solving 1. 2 Hours.

PR or CONC: MATH 128 or MATH 129 or MATH 150 or MATH 155. Engineering problem solving methodologies and analysis. Use of computers in problem solving, technical report writing, team based project work and presentations.

ENGR 102. Engineering Problem Solving 2. 3 Hours.

PR: ENGR 101 and (MATH 128 or MATH 129 or MATH 150 or MATH 155) with a minimum grade of C- in each. Continued development of engineering problem-solving, teamwork, and communication skills with emphases on using the computer as a tool and algorithm development with a high-level language such as MATLAB.

ENGR 129. Engineering Mathematics. 1 Hour.

PR: Consent. Review of key pre-calculus and early calculus concepts and topics for engineering students.

ENGR 191. First-Year Seminar. 1-3 Hours.

Engages students in active learning strategies that enable effective transition to college life at WVU. Students will explore school, college and university programs, policies and services relevant to academic success. Provides active learning activities that enable effective transition to the academic environment. Students examine school, college and university programs, policies and services.

ENGR 199. Orientation to Engineering. 1 Hour.

Orientation to degree programs and requirements, departmental resources, curriculum options, students' responsibilities, and opportunities. Development of academic success strategies and University experiences to equip students to make life decisions.

ENTR 102. Fundamentals of Entrepreneurship. 3 Hours.

Students will develop a fundamental understanding of how to develop an entrepreneurial mindset that can benefit them regardless of their major field of study in a wide variety of life settings. Students will also develop a fundamental understanding of how to create, develop, evaluate, act on, and support entrepreneurial opportunities. Exposure will be gained to innovative ecosystems throughout the university.

EQST 101. Introduction to Equine Science. 3 Hours.

Provides a basic understanding of equine science and management. Topics include the history and future of the equine industry, breeds, selection, health and nutrition, along with basic management practices.

EQST 105. Equine Safety and Behavior. 3 Hours.

Discusses and demonstrates safety measures required when working with and around horses. Students will learn the importance of understanding equine behavior for safety, management, and training purposes.

EQST 115. Riding Basics. 1 Hour.

Provides riding instruction aimed at improving the rider's body position, balance, control, seat, strength, confidence and concentration. Riders will learn the skills and techniques needed to handle and control a horse effectively from the saddle.

EQST 120. Introduction to Horsemanship and Training. 4 Hours.

PR: EQST 105. Focuses on the understanding and application of natural horsemanship and a variety of horsemanship and training techniques, including gaining control and respect, handling, ground work, and starting colts. (3 hr. lec, 3 hr lab.).

EQST 160. Basic Equine Hoof Care and Management. 1 Hour.

Introduces physiology of the hoof, trimming, shoeing, corrective shoeing and shoes, breed requirements, identifying and treatment of lameness.

EQST 185. Equine Health and Emergency Management. 3 Hours.

Provides students with the skills necessary to effectively manage the health of horses, including best practices in emergency care, observation, and prevention.

EQST 199. Orientation to Equine Studies. 1 Hour.

Orientation to degree programs and requirements, departmental resources, curriculum options, student responsibilities and employment opportunities in the equine industry.

EQST 230. Advanced Horsemanship and Training. 4 Hours.

PR: EQST 105 and EQST 120. Improves overall communication between the horse and rider. Students will learn techniques used in training horses to be willing and responsive to the rider's subtle cues. (3 hr. lec., 3 hr. lab.).

EQST 240. Equine Facilities and Stable Management. 4 Hours.

Teaches practical skills and considerations that will be needed to own or operate an equine facility, including functional requirements, design and layout, safety and operation of farm equipment, and waste management. (3 hr. lec., 3 hr.).

EQST 290. Teaching Practicum. 1-3 Hours.

PR: Consent. Teaching practice as a tutor or assistant.

EQST 291. Professional Field Experience. 1-18 Hours.

PR: Consent. (May be repeated for a maximum of 18 credit hours.) Prearranged experiential learning program, to be planned, supervised, and evaluated for credit by faculty and field supervisors. Involves temporary placement with public or private enterprise for professional competence development.

EQST 293. Special Topics. 1-6 Hours.

PR: Consent, Investigation of topics not covered in regularly scheduled courses.

ESWS 155. Elements of Environmental Protection. 3 Hours.

An introduction to land and water resources and their management and protection. An evaluation of the relationships between human activities and natural environments and the interaction between natural resource utilization and development.

ESWS 202. Principles of Soil Science. 3 Hours.

PR: (CHEM 111 or CHEM 115) and PR or CONC: (AGRN 202L or AGRN 203 or ESWS 202L). Introductory course. Soils as a natural resource emphasizing physical, chemical, and biological properties in relation to plant growth and production, land use and management, soil and water pollution, and environmental protection. (Regional campus concurrent).

ESWS 202L. Principles of Soil Science Laboratory. 1 Hour.

PR or CONC: ESWS 202 or consent. (Regional campus concurrent.).

EXPH 101. Introduction to Exercise Physiology. 2 Hours.

A broad and foundational look at the function and adaptation of the systems of the human body in response to exercise.

EXPH 240. Medical Terminology. 2 Hours.

The study of medical language with special emphasis given to terms used in the field of exercise physiology.

EXPH 364. Kinesiology. 3 Hours.

PR: MATH 124 or higher or (ACT math score of 26 or SAT math score of 580 and (QRA Part 1 score of 15 and QRA Part 2 score of 9)) and sophomore standing or consent. Anatomical, mechanical, and musculoskeletal study of the human body as the instrument for efficient performance of motor activities.

FNRS 100. Forest Resources in United States History. 3 Hours.

Examines human use of forest resources in America from pre-Colombian times to present. Exploration of factors that impact the use of wood products.

FNRS 101. Careers in Natural Resources Management 1. 1 Hour.

An introduction to professional activities in forest resources management, recreation and parks management, wildlife and fisheries management, and wood science and utilization. Survey of major issues in natural resources management and conservation. (Required only for students who rank as freshman in the Division of Forestry.).

FNRS 140. West Virginia's Natural Resources. 3 Hours.

Survey of policies and practices in development and use of soil, water, forest, wildlife, mineral, and human resources in West Virginia.

FNRS 191. First-Year Seminar. 1-3 Hours.

Engages students in active learning strategies that enable effective transition to college life at WVU. Students will explore school, college and university programs, policies and services relevant to academic success. Provides active learning activities that enable effective transition to the academic environment. Students examine school, college and university programs, policies and services.

FNRS 203. Careers in Natural Resources Management 2. 1 Hour.

Planning a career in forestry and natural resources professions. Developing a career strategy, resume building, and conducting a successful job search.

FNRS 205. Dendrology. 2 Hours.

PR or CONC: FNRS 205L. Classification and silvical characteristics of North American forest trees.

FNRS 205L. Dendrology Laboratory. 1 Hour.

PR or CONC: FNRS 205 or FOR 205. Dendrology - FNRS 205 Laboratory.

FNRS 212. Forest Ecology. 3 Hours.

How forest ecosystems work: their role in the global ecosystem, variability of forests in space and time, forest structure and function.

FNRS 212L. Forest Ecology Laboratory. 1 Hour.

PR or CONC: FNRS 212 lecture, can be taken concurrently. Forest Ecology - FNRS 212 Laboratory. Central concepts of forest ecology are practiced through the collection, analysis, and interpretation of experimental data. Findings are communicated as an oral presentation and written report.

FNRS 222. Forest Mensuration. 4 Hours.

PR: MATH 124 or higher and Coreq: FNRS 222L. Estimating volume and growth of trees and forest stands with emphasis on the mathematical and statistical techniques involved. Laboratories include practical field experience.

FNRS 222L. Forest Mensuration Laboratory. 0 Hours.

PR: Corequisite of FNRS 222. Forest Mensuration - FNRS 222 Laboratory.

FNRS 240. Introduction to Computing in Natural Resources. 3 Hours.

PR: Corequisite of FNRS 240L. Introduction to computer applications in natural resource management. Emphasis on MS Excel statistical analysis tools, MS Access, Visual Basic Programming, hand held PCs and application examples.

FNRS 240L. Introduction to Computing in Natural Resources Laboratory. 0 Hours.

FNRS 240L. Introduction to Computing in Natural Resources Laboratory. PR: Corequisite of FNRS 240. Introduction to Computing in Natural Resources - FNRS 240 Laboratory.

FNRS 311. Silvicultural Systems. 4 Hours.

PR: (FMAN 222 or (FNRS 222 and FNRS 222L) and (FNRS 205 and FNRS 205L) or FOR 205) and Coreq: FNRS 311L. The theory and practice of controlling forest stand establishment, composition, structure, and growth. Systems include: reproduction methods, release operations, and intermediate treatments. Pre-requisite(s) and/or co-requisite(s) may differ on regional campuses.

FNRS 311L. Silvicultural Systems Laboratory. 0 Hours.

PR: Corequisite of FNRS 311. Silvicultural Systems - FNRS 311 Laboratory.

FRCH 101. Elementary French 1. 3 Hours.

PR: Appropriate score on the Departmental Placement Test or departmental consent. Introduction to the sound and writing systems of the language, with emphasis on listening, speaking, reading, and writing within an authentic cultural context. (Course presumes no prior knowledge of the language.)

FRCH 102. Elementary French 2. 3 Hours.

PR: FRCH 101 or appropriate score on the Departmental Placement Test or departmental consent. Continuation of French 101.

FTEC 100. Forest Safety. 1 Hour.

Introduces the fundamentals of safety in the field. Topics include equipment care and use, forest hazard identification, and first aid and CPR training.

FTEC 102. Land Surveying. 4 Hours.

PR: MATH 124 or consent. Plane surveying including hand compass and survey equipment, map reading, deed and title research, land descriptions and property line location.

FTEC 110. Summer Field Experience/Internship. 4 Hours.

PR: Consent. Summer field experience within the forestry field. Possible employer may include state and federal government, private industry, and consultant foresters. NP.

FTEC 203. Wood Products. 3 Hours.

PR: FOR 205. Introduces the fundamentals of converting standing timber to wood products, processing methods, and wood identification.

FTEC 204. Forest Harvesting. 3 Hours.

PR: MATH 124. Fundamentals of forest harvesting systems, occupational safety and health, environmental issues, equipment evaluation and selection, and trucking of forest products.

FTEC 205. Aerial Photograph Interpretation. 3 Hours.

PR: MATH 124 or Consent. Aerial photograph and imagery interpretation and measurement techniques. applied to land management inventories, mapping, road location, and procurement.

FTEC 206. Multiple Use of Forest Resources. 4 Hours.

PR: FOR 205. Survey of the use of forest and land resources for multiple uses including recreation and wildlife.

FTEC 207. Forest Health and Protection. 4 Hours.

PR or CONC: FMAN 311. Examines the fundamentals of forest protection and health including fire, insects, and disease.

FTEC 208. Applications of Geographic Information Systems in Forestry. 3 Hours.

PR: FTEC 105. Fundamental applications of Geographic Information Systems within the forestry field. Course will focus on hardware, software, data collection and manipulation.

FTEC 210. Forest Management. 3 Hours.

PR: FTEC 207 and PR or CONC: FTEC 204 and FTEC 206. Principles of forest resource management and the preparation of a forest management plan. Topics include: multiple use management, decision making, resource and market analysis, finance, contacts, and cutting schedules.

GEOG 102. World Regions. 3 Hours.

Comparison and relationships of world regions. Geographical perspectives of contemporary global problems. Developing regions contrasted with modernized regions and the consequences of their interactions.

GEOG 107. Global Climate System. 3 Hours.

Introduction to the global climate system, emphasizing change in climates across space and time, and how current climatic changes arise from interactions among the atmosphere, biosphere, hydrosphere, lithosphere, and human societies.

GEOG 107L. Global Climate System Laboratory. 1 Hour.

PR or CONC: GEOG 107. Introduction to global environmental systems operating on the earth's surface, emphasizing weather and climate, soils, natural vegetation, and geomorphology, and examination of human interaction with these natural processes.

GEOG 108. Human Geography. 3 Hours.

This course introduces students to geographic dimensions of important topics in today's world. Students will learn about multiple approaches within human geography, including: cultural, economic, political, and urban geography. Students will use these approaches to understand and think critically about current issues in the world around them, from local to global scales.

GEOG 205. Climate and Sustainability. 3 Hours.

Examines the sustainability of natural resources in the context of global climate change. Emphasis is on the sustainability of food, water, energy, and other resources in the United States within the context of the global environment.

GEOL 101. Planet Earth. 3 Hours.

Composition and structure of the Earth and the physical processes that change Earth's surface.

GEOL 101L. Planet Earth Laboratory. 1 Hour.

PR or CONC: GEOL 101. Laboratory study of the Earth using rocks, minerals and maps.

GEOL 105. A Study of Dinosaurs. 3 Hours.

A beginning course in the study of dinosaurs. Classification, biology and behavior will be studied.

HIIM 110. Introduction to U.S. Healthcare Delivery System. 3 Hours.

Overview of Federal, State, and local agencies and their role in the healthcare system. Emphasis on cost, access, quality and types of organizations and services provided.

HIIM 112. Fundamentals of Health Information Management. 3 Hours.

Introduction to the health information management profession and the health record. An overview of the health record, data format, structure, and documentation requirements including accreditation, licensure, regulatory standards and ethical standards of practice.

HIIM 231. Health Information Management Applications. 2 Hours.

PR: CS 101. A study of Electronic Health Records (EHR) and clinical, financial, and administrative applications. Includes a survey of implementation techniques for collecting, storing, retrieving and managing healthcare data.

HIIM 233. Health Informatics and Information Management Disease Fundamentals and Management. 3 Hours.

PR or CONC: PATH 200 or PALM 200. A study of the nature and cause of disease and management, including qualifications and pharmaceutical interventions relevant to HIIM tasks.

HIIM 235. Coding and Classification of Diseases. 3 Hours.

PR: WVU sections require PR or CONC: ((NBAN 205 or PALM 205) and (NBAN 206 or PALM 206)) with a minimum grade of C- in both, PSC sections require PR or CONC: BIOL 230 with a minimum grade of C-. Basic coding using the latest edition of the International Classification of Diseases. Applications of classifications, taxonomies, nomenclatures, terminologies, and vocabularies to include evaluation and auditing for disease coding.

HIIM 237. Introduction to Professional Practice. 1 Hour.

Exploration of Health Informatics and Health Information Management careers, certifications and requirements, resources, curriculum options, student responsibilities, and opportunities for volunteer service. Observation of practitioners in a variety of facility settings.

HIIM 240. Classification of Healthcare Procedures. 3 Hours.

PR: HIIM 235. Basic coding of healthcare procedures using government approved classification systems and nomenclatures. Applications of classifications, taxonomies, nomenclatures, terminologies, and vocabularies to include evaluation and auditing for procedure coding.

HIIM 242. Healthcare Reimbursement and Revenue Cycle Management. 2 Hours.

A study of systems used for professional and institutional reimbursement in various healthcare settings. Application of revenue cycle principles.

HIIM 244. Principles of Health Informatics and Information Management Quality Management. 2 Hours.

A survey of quality measures, techniques, and theories including utilization review, risk management, patient outcomes, and medical staff credentialing.

HIIM 246. Fundamentals of Clinical Documentation Improvement. 3 Hours.

A study of clinical documentation improvement practices and the management of the clinical documentation process.

HIIM 247. Registries in Healthcare. 2 Hours.

A study of healthcare registry management and the operational components of registries. Registry types and registry policy are included.

HIIM 248. Health Informatics and Information Management Professional Practice 1. 1 Hour.

PR: HIIM 237. Clinical practice experience with a focus on coding and classifications systems, revenue and quality management, clinical documentation improvement and the application and use of technologies associated with these domains.

HIST 101. European History: Antiquity to 1600. 3 Hours.

(HIST 101 does not have to precede HIST 102.) A survey of the major developments in European history beginning with the ancient Mediterranean world and concluding with Reformation Europe.

HIST 102. European History since 1600. 3 Hours.

(HIST 102 may precede HIST 101.) A survey of major developments in European history since 1600 with attention to Europe's emerging industrial society and changing role in world affairs.

HIST 152. Growth of the American Nation to 1865. 3 Hours.

(HIST 152 does not have to precede HIST 153.) Examines the basic political, economic, and social forces in formation and development of the United States before 1865. Emphasis on national development from independence through the Civil War.

HIST 153. Making of Modern America: 1865 to the Present. 3 Hours.

(HIST 153 may precede HIST 152.) Continues the examination of basic political, economic, and social forces in the development of the United States since the Civil War.

HIST 179. World History to 1500. 3 Hours.

Comparative history of Africa, Asia, and Europe from earliest times until 1500. Political, economic, social, and religious developments with emphasis on patterns of authority, the individual, nature, and society.

HIST 180. World History Since 1500. 3 Hours.

Comparative history of Africa, Asia, and Europe 1500 to the present. Political, economic, and social developments with emphasis on patterns of authority, the individual, nature, society, and the impact of the West.

HIST 209. Twentieth Century Europe. 3 Hours.

Traces the major political, economic, and social developments of Europe from World War I to the present.

HIST 250. West Virginia. 3 Hours.

Historical foundations and development of West Virginia, with particular emphasis upon the growth of the government, the economy, and the traditions of the state.

HIST 293. Special Topics. 1-6 Hours.

PR: Consent. Investigation of topics not covered in regularly scheduled courses.

HIST 302. Practicing History. 3 Hours.

Acquisition of the skills necessary to be an effective historian, including critically reading and analyzing primary and secondary sources, learning the basics of historiography, and creating an independent research topic.

HIST 418. Eastern Europe Since 1945. 3 Hours.

The social, economic, intellectual, cultural, and political history of Eastern Europe since the Second World War. Special emphasis on the causes of the East European revolutions of 1989 and the problems of post-communist transition. (Offered every third semester.)

HIST 453. Civil War and Reconstruction. 3 Hours.

Causes as well as constitutional and diplomatic aspects of the Civil War; the role of American black in slavery, in war, and in freedom; and the economic and political aspects of Congressional Reconstruction.

HLSC 104. Nutrition. 3 Hours.

The study of normal and therapeutic nutrition and its implications in health care across the lifespan. Principles of normal nutritional needs of infants, children, adolescents, pregnant, and lactating women, and other adults are studied in relation to the nutrients as provided by the basic four food groups.

HLSC 172. First Aid and Emergency Care. 2 Hours.

Introductory course in emergency services aimed at reducing the potential of permanent disability or threats to life, as well as pain, damage, or suffering of less serious nature.

HLSC 270. Introduction To Health Careers. 1 Hour.

A study of careers in the health professions. Readings, lectures, and discussions by professionals in many health fields will include the educational requirements for and functions of their respective health professions. (Pass/fail grading only.)

HLSC 491. Professional Field Experience. 1-18 Hours.

PR: Consent. (May be repeated up to a maximum of 18 hours.) Prearranged experiential learning program, to be planned, supervised, and evaluated for credit by faculty and field supervisors. Involves temporary placement with public or private enterprise for professional competence development.

HN&F 171. Introduction to Human Nutrition. 3 Hours.

Nutrient structure, metabolism, integrated function and their importance to human well-being during all stages of the life cycle. Current concerns and those of special interest to college students in meeting nutrient needs.

HN&F 271. Fundamentals of Nutrition. 3 Hours.

PR:HN&F 171. The occurrence, uptake and metabolic roles of essential and key non-essential nutrients will be discussed in relation to growth, reproduction, and health in human subjects.

HONR 191. First-Year Seminar. 1-3 Hours.

Engages students in active learning strategies that enable effective transition to college life at WVU. Students will explore school, college and university programs, policies and services relevant to academic success. Provides active learning activities that enable effective transition to the academic environment. Students examine school, college and university programs, policies and services.

HONR 450. Honors EXCEL Project Development. 1 Hour.

This course will enable and enhance experiential learning for students in the Honors EXCEL program. Students will develop skills in leadership, project management, communication and collaborative scholarship.

HONR 451. Honors EXCEL: Summative Experience. 1 Hour.

This course is designed to enable and enhance experiential learning for students in the Honors EXCEL program. Students will develop written and oral communication skills. Students will present their work to stakeholders on- and/or off-campus.

HORT 184. Trees and Shrubs. 2 Hours.

Identification, description, adaptability, culture, and evolution of selected woody plant materials with emphasis on their use as landscape materials.

HORT 187. Introduction to Greenhouse/Nursery Management. 4 Hours.

PR: Two semesters of inorganic chemistry and HORT 200 or consent. Greenhouse and nursery as a controlled plant environment. How to regulate factors influencing plant growth and development within specialized environments of greenhouses and Pot' n Poot nurseries.

HORT 220. General Horticulture. 3 Hours.

PR: BIOL 101 and (BIOL 101L or BIOL 103) or consent and Coreq: HORT 220L. Principles underlying present-day horticulture practice with special emphasis on how basic discoveries in plant science have been applied in horticulture.

HORT 220L. General Horticulture Laboratory. 0 Hours.

Coreq: HORT 220. General Horticulture - HORT 220 Laboratory.

HORT 251. Floral Design. 3 Hours.

Basic course in flower arrangement to cover occasions for the home and retail flower shop.

HORT 260L. Woody Plant Materials Laboratory. 3 Hours.

Common ornamental woody plants, their identification, cultural needs, and evaluation of use; some outdoor study and a one-day nursery trip.

HORT 262. Herbaceous Plant Materials. 3 Hours.

PR: Corequisite of HORT 262L. Identification, description, adaptability, and evaluation of selected herbaceous annuals and perennials with emphasis on their use as design elements.

HORT 262L. Herbaceous Plant Materials Laboratory. 0 Hours.

Coreq: HORT 262. Herbaceous Plant Materials - HORT 262 Laboratory.

HORT 293. Special Topics. 6 Hours.

PR: Consent. Investigation of topics not covered in regularly scheduled courses.

HORT 330L. Plant Propagation Laboratory. 0 Hours.

Coreq: HORT 330. Plant Propagation - HORT 330 Laboratory.

HORT 493. Special Topics. 6 Hours.

PR: Consent. Investigation of topics not covered in regularly scheduled courses.

HRMG 440. Training and Development. 3 Hours.

PR: MANG 330 with a minimum grade of C-. This course provides a theoretical and practical understanding of the field of training and development and offers some practical approaches to conducting training programs.

HRMG 450. Staffing and Selection. 3 Hours.

PR: MANG 330 with a minimum grade of C-. This course focuses on the management of employee staffing and selection and includes such topics as government regulations affecting selection processes, reliability and validity of selection measures, and the measurement of actual job performance.

HRMG 460. Compensation and Benefits. 3 Hours.

PR: MANG 330 with a minimum grade of C-. Designing and implementing total compensation systems in both private and public sectors. The emerging elements of total compensation systems are included, providing insights into problems and opportunities for personnel.

HRMG 470. Conflict Management. 3 Hours.

This course focuses on the management of conflict in an organizational setting. The topics covered include foundations of individual behavior, styles for managing conflict, negotiations, mediation, and arbitration.

HRMG 480. Collective Bargaining and Labor Relations. 3 Hours.

PR: MANG 330 with a minimum grade of C-. Examination of the theory and practice of collective bargaining. Topics include economics and historical environment, labor law, unionization, contract negotiation, contract content patterns, conflict resolution, grievance handling, and an introduction to arbitration.

HTOR 110. Food Production 1. 6 Hours.

Develops basic skills needed in the kitchen. Students learn proper techniques, terminology, and equipment for activities ranging from carving to menu planning. Prepare small quantity menus in a commercial-kitchen setting and review current food quality standards.

HTOR 111. Food Production 2. 6 Hours.

Builds on techniques learned in HTOR 110, with an emphasis on restaurant and dining room operations. Exercises will include exploration in classic cuisines, dinner promotion methods, personnel training, and budget development. Students will develop the culinary skills needed to prepare professional cafeteria style meals as well as catered events.

HTOR 120. Sanitation. 2 Hours.

Stresses the principles of safe food preparation and handling. Topics include safe food purchasing; storage and preparation; causes of food borne illness; insect and rodent control; and government rules and regulations pertaining to food service sanitation.

HTOR 130. Inventory, Labor, and Cost Control. 3 Hours.

Principles of modern food and beverage management as applied to the food service industry. Emphasis on systems of food and labor cost controls, budgets for food service operations, pricing and planning, and menu analysis. Relationships between management and employees and current trends in the food service industry will also be explored.

HTOR 135. Baking Fundamentals. 3 Hours.

PR: HTOR 110 and HTOR 111 and HTOR 120. In this course, students learn the fundamentals of preparation and baking of a variety of breads, pastries, cookies and desserts.

HTOR 140. Restaurant Management. 6 Hours.

PR: HTOR 110 and HTOR 111. Provides a realistic understanding of how to operate a restaurant. Experience will be provided in cooking food to order, service, managerial skills, training and supervising employees, purchasing food products, and managerial decision making.

HTOR 141. Kitchen Layout. 3 Hours.

Basic facts, principles, and learning experiences involved in planning a commercial kitchen. Appropriate kitchen equipment selection and sequence of work and material flow are analyzed for specific menus.

HTOR 150. Fine Dining. 3 Hours.

PR: HTOR 140. Students learn skills necessary to work in a five-star resort, hotel, or restaurant. Skills include serving foods sent from the kitchen to be prepared tableside, and include carving, flaming, filleting, and mixing of meats, fish and salads.

HTOR 160. Topics in International Cuisine. 1 Hour.

The fundamental principles of this course are based on international cooking and trends in the vast variety of foods around the world to bring new ideas and variety in the cooking. Grading will be pass/fail.

HTOR 162. Topics in Fine Dining. 1 Hour.

The fundamental principles of this course are based on practices associated with fine dining. Topics/activities will include the preparation and presentation of gourmet foods, table preparation, and serving procedures. Course will be graded Pass/Fail.

HTOR 220. Culinary Menus and Calculations. 3 Hours.

In this course, students develop basic culinary math skills and menu building.

HTOR 230. Advanced Culinary Principles. 3 Hours.

PR: HTOR 110 and HTOR 111 and HTOR 120. The student will develop advanced culinary techniques while utilizing fundamental cooking principles as regional cuisines and historically relevant recipes of the United States are explored.

HTOR 293. Special Topics. 1-6 Hours.

PR: Consent. Investigation of topics not covered in regularly scheduled courses.

HTOR 295. Internship. 3 Hours.

PR: Sophomore Status. Supervised professional study conducted in a hospitality or tourism field setting.

HUM 101. Introduction to Western Civilization 1. 3 Hours.

Presents the high points of Greco-Roman and Medieval European civilizations: their art, architecture, philosophy, religion, literature and music.

HUM 102. Introduction to Western Civilization 2. 3 Hours.

Presents the art, architecture, philosophy, religion, literature and music of the following periods in Western civilization: the Renaissance, the Age of Classicism and the revolutionary nineteenth and twentieth centuries.

HUM 113. Faculty Led Travel: Greece. 1 Hour.

Learn about the art, architecture, philosophy, religion, literature, and history of Greece, through faculty led travel.

HUM 232. Greek and Roman Myths. 3 Hours.

Introduction to the primary characters and most important stories of classical Greek and Roman mythology, with examination of key aspects of history and culture, including art, literature, philosophy, and religion.

JRL 191. First-Year Seminar. 1-3 Hours.

Engages students in active learning strategies that enable effective transition to college life at WVU. Students will explore school, college and university programs, policies and services relevant to academic success. Provides active learning activities that enable effective transition to the academic environment. Students examine school, college and university programs, policies and services.

JRL 220S. Introduction to Photojournalism. 3 Hours.

Basic techniques of journalistic photography, digital imaging and editing. Students must have access to a film or digital camera.

JRL 318S. Beat Reporting. 3 Hours.

PR: (JRL 215 or MDIA 215 or MDIA 215S) with a minimum grade of C-. Essentials of developing and covering a news beat. Students generate stories, cultivate sources, and discover their community.

JRL 426S. Investigative Reporting. 3 Hours.

PR: (JRL 318 or JRL 318S or JRL 386 or JRL 386S or TVJ 386) with a minimum grade of C-. Reporting on the agencies, structures, and programs that make society work, including circuit court and police.

JRL 495. Independent Study. 1-3 Hours.

Faculty supervised study of topics not available through regular course offerings.

LARC 105. Introduction to Landscape Architecture, Environmental Design and Planning. 3 Hours.

A general overview of the field of landscape architecture, environmental design and planning. The course reviews the practices of design and planning professionals and their connections to society. An emphasis is placed on past development traditions and current sustainable development methods, strategies, and impacts of planning and design through the review of past and current projects.

LARC 212. History of Landscape Architecture. 3 Hours.

A broad survey of the history of the designed human environment with emphasis on the development of landscape architecture. (Does not fulfill Cluster A for landscape architecture students.)

LDR 201. Principles of Leadership. 3 Hours.

This course serves as an introduction to leadership theory and practice. The course will examine various aspects of the literature on leadership; provide practice for developing leadership skills; and offer personal experiences for self-reflection.

MAE 241. Statics. 3 Hours.

PR: WVU sections require PHYS 111 and (MATH 154 or MATH 155) all with a minimum grade of C-, WVUIT sections require MATH 155. Engineering applications of force equilibrium. Vector operations, couples and moments, resultants, centers of gravity and pressure, static friction, free-body diagrams, trusses and frames.

MAE 242. Dynamics. 3 Hours.

PR: WVU sections require MAE 241 and MATH 156 with a minimum grade of C- in each, WVUIT sections require MAE 241 and MATH 156. Newtonian dynamics of particles and rigid bodies. Engineering applications of equations of motion, work and energy, conservative forces, acceleration in several coordinate systems, relative motion, instantaneous centers, and plane motion.

MAE 243. Mechanics of Materials. 3 Hours.

PR: WVU sections require MAE 241 and MATH 156 with a minimum grade of C- in each, WVUIT sections require MAE 241 and MATH 156. Stress deformation, and failure of solid bodies under the action of forces. Internal force resultants, stress, strain, Mohr's circle, and mechanical properties of materials, generalized Hooke's law. Axial bending and buckling loads, and combinations.

MAE 320. Thermodynamics. 3 Hours.

PR: WVU sections require MATH 156 and PHYS 111 with a minimum grade of C- in each, WVUIT sections require MATH 156. Principles of thermodynamics; properties of ideal gases and vapors; first and second laws of thermodynamics; basic gas and vapor cycles; basic refrigeration.

MAE 495. Independent Study. 1-6 Hours.

Faculty supervised study of topics not available through regular course offerings.

MANG 330. Human Resource Management Fundamentals. 3 Hours.

PR or CONC: BCOR 370. Fundamental principles and practices related to the procurement, development, maintenance, and utilization of human resources. Focus on areas such as human resource planning, selection training, performance appraisals, compensation, safety and health and labor relations.

MATH 101. Concepts of Mathematics Co-Requisite. 1 Hour.

This is a corequisite course to be taken concurrently with MATH 121. This course reinforces basic learning/study skills as well as concepts necessary to be successful in MATH 121. Based on the criteria defined by the Math Department, some students are required to register for this course.

MATH 104. Algebra with Applications Co-Requisite. 1 Hour.

PR: Satisfy the minimum ACT/SAT math score, or satisfactory performance on departmental placement examination, (prerequisites may vary on regional campuses) or MATH 122 with a minimum grade of C-. This is a co-requisite support course associated with MATH 124. This course reinforces basic learning and study-skills along with intermediate algebra and computational skills necessary to succeed in MATH 124. Based on the criteria defined by the Math Department, some students are required to register for this course based on placement.

MATH 106. College Algebra Co-Requisite. 1 Hour.

PR: Satisfy the minimum ACT/SAT math score, or satisfactory performance on departmental placement examination, (prerequisites may vary on regional campuses) or MATH 122 with a minimum grade of C-. This is a co-requisite course associated with MATH 126: College Algebra. This course reinforces basic learning/study-skills and intermediate algebra skills necessary to succeed in MATH 126. Based on the criteria defined by the Math Department, some students are required to register for this course. A compensatory co-requisite course carries no credit and no grade.

MATH 121. Intro Concepts Of Mathematics. 3 Hours.

(Designed for non-science majors who do not need the techniques of mathematics for other course work in their programs.) Topics in modern mathematics.

MATH 122. Quantitative Skills and Reasoning. 3 Hours.

PR: Satisfactory placement through ACT/SAT or ALEKS. Introductory study of quantitative and reasoning skills needed for success in science, technology, engineering, and mathematics.

MATH 124. Algebra with Applications. 3 Hours.

PR: Minimum ACT/SAT math score, or satisfactory performance on departmental placement examination, or MATH 122 with a minimum grade of C-, (prerequisites may vary on regional campuses). Study of algebra with an emphasis on applications for science, business, technology, and social science. Topics include graphing and solving problems using linear, quadratic, square-root, logarithmic, and exponential functions, solving equations, performing operations on matrices.

MATH 125. Applied College Mathematics. 3 Hours.

PR: MATH 91 or satisfy the minimum ACT/SAT Math score. Material covered will include applications involving ratios and proportions, percents, measurement, and geometric relationships to support algebraic modeling of linear, quadratic, exponential and logarithmic functions. Modeling of real world scenarios will be supported through the use of spreadsheets.

MATH 126. College Algebra. 3 Hours.

PR: Satisfy the minimum ACT/SAT math score, or satisfactory performance on departmental placement examination, or MATH 122 with a minimum grade of C-, (prerequisites may vary on regional campuses). Introduces the foundations of analysis designed to precede the calculus sequence with emphasis on functions and graphs. Topics include properties of absolute value, polynomial, rational, exponential, logarithmic functions, and techniques for solving equations and inequalities.

MATH 128. Plane Trigonometry. 3 Hours.

PR: MATH 126 with a minimum grade of C-. Study of trigonometric functions, identities, vectors, complex numbers, and trigonometric equations. (Prerequisites may vary on regional campuses).

MATH 129. Pre-Calculus Mathematics. 4 Hours.

PR: Satisfy the minimum ACT/SAT math score, or satisfactory performance on departmental placement test, (prerequisites may vary on regional campuses). A treatment of algebra, analytic geometry, and trigonometry.

MATH 150. Applied Calculus. 3 Hours.

PR: Satisfy the minimum ACT/SAT math score, or satisfactory performance on departmental placement examination, or C- in MATH 124 or MATH 126 or MATH 129. For students in other disciplines needing calculus for applications. Limits of sequences and functions, continuity derivatives, and integrals of polynomials, rational functions, and exponential and logarithmic functions, partial derivatives, maxima and minima. Pre-requisite(s) and/or co-requisite(s) may differ on regional campuses.

MATH 155. Calculus 1. 4 Hours.

PR: Satisfy the minimum ACT/SAT math score, or satisfactory performance on departmental placement examination, or minimum grade of C- in MATH 129, or minimum grade of C- in MATH 126 and MATH 128. Introduction to limits, continuity, derivatives, antiderivatives, definite integrals, and applications of the derivative.

MATH 156. Calculus 2. 4 Hours.

PR: A minimum grade of C- in MATH 154 or MATH 155. Techniques of integration, application of the definite integral, polar coordinates, indeterminate forms, and infinite series.

MATH 251. Multivariable Calculus. 4 Hours.

PR: MATH 156 with a minimum grade of C-. Introduction to solid analytic geometry, vector algebra, and calculus of several variables.

MATH 261. Elementary Differential Equations. 4 Hours.

PR: WVU and PSC sections require MATH 251 with a minimum grade of C-, WVUIT sections require MATH 251 with a minimum grade of C- or MATH 315 with a minimum grade of B-. Ordinary differential equations, Laplace transforms, partial differential equations, Fourier series, and applications.

MDIA 101. Media and Society. 3 Hours.

Examines the relationship between media, culture and society, with emphasis on the history, structure, and organization of the mass media.

MDIA 215S. Media Writing. 3 Hours.

PR: College of Media major or minor. Introduction to the fundamental reporting and storytelling skills that are the foundation of all media writing: print, radio, television, public relations, advertising and social media.

MDIA 225S. Media Tools & Applications. 3 Hours.

PR: Must be a College of Media major or Interactive Media Design minor. Intended for College of Media majors and Interactive Media Design minors, this lecture/lab course covers fundamental principles and practices of multimedia content gathering and editing in preparation for upper-level courses with the College of Media.

MDS 270. Effective Public Speaking. 3 Hours.

PR: Corequisite of MDS 270S. Designed for improvement of the student's speech based upon theory and demonstrated performance of voice and diction skills and public-speaking skills for effective communication in a variety of speaking situations.

MDS 270S. Effective Public Speaking Studio. 0 Hours.

PR: Corequisite of MDS 270. This studio course is designed for improvement of the student's speech based upon theory and demonstrated performance of voice and diction skills and public-speaking skills for effective communication in a variety of speaking situations.

MDS 289. Foundations of Integrated Studies. 3 Hours.

Introduces students to integrated studies as an academic discipline with its own terminology, research methods, and tools applicable to addressing complex 21st century problems.

MICB 200. Medical Microbiology. 3 Hours.

PR: (CHEM 111 and CHEM 112) or (CHEM 115 and CHEM 116). Provides basic background in medical microbiology. Emphasis is on basic structure of all microorganism groups including bacteria, fungi, viruses, protozoa and helminths; epidemiology, immunology, and infectious disease.

MINE 261. Engineering Computer Aided Design. 2 Hours.

PR: ENGR 102. Engineering CAD concepts and techniques; implementing applications of engineering computer aided design for engineering graphics and plant design; introduction of geometry and calculation of engineering works.

MT 105. Industrial Safety and Environmental Protection. 2 Hours.

The course is designed to develop safe workplace practices to ensure individual protection, the protection of others, and the environment. The application of the requirements and guidelines in accordance with the Occupational Safety and Health Act (OSHA) or Environmental Protection Agency (EPA) will be demonstrated throughout the course.

MT 121. Introduction to Machinery. 3 Hours.

This course is a hands on lab to acquaint the students with the machinery and the industrial environment. This is the application of skills and knowledge of the measurement course and the tools that the machinist will be expected to apply to his/her daily task.

MT 136. Mathematics for Machine Technology 1. 3 Hours.

The course covers arithmetic and algebraic concepts such as fractions, decimals, metric system, formulas, ratio and proportion; principles and propositions of geometry pertaining to lines, circles, triangles, and polygons.

MT 137. Mathematics for Machine Technology 2. 3 Hours.

Continuation of MT 136.

MT 200. Blueprint Reading. 3 Hours.

Designed to develop the knowledge, abilities, and skills to use standard and GDT orthographic blueprints as required in a machine shop.

MT 205. Measurement in Machining. 3 Hours.

Designed to develop the knowledge, abilities, and skill to use measurement instruments necessary to the machine tool industry.

MT 215. Metal Working Theory and Applications. 10 Hours.

Students will become skilled in the use of machines and processes utilized in metalworking. They will develop a basic knowledge of CNC machining and programming, and the calculation of speeds and feeds.

MT 216. Metalworking Theory and Application 1. 4 Hours.

This course is designed to produce an entry-level machinist with skills to be productive. Course includes awareness of safety, concern for fellow workers, and the ability and willingness to work with fellow team members. In addition to classroom time, students spend a minimum of 120 hours in machine technology lab for skill development.

MT 220. Introduction to Computer Aided Design. 4 Hours.

Introduction to computer aided drafting. Topics include construction and editing tools; templates and plotting; editing with GRIPS; solid modeling, assembly, and editing; blueprint reading: SI metric system; welding drawing; and ge.

MT 223. Advanced Technical Specializations. 4 Hours.

The application of skills and knowledge used in turning, milling, and drilling operations with emphasis on specific types of machining.

MT 233. National Institute for Metalworking Skills Credentialing. 4 Hours.

PR: Consent. This course will acquaint students with the National Institute for Metalworking Skills (NIMS) and prepare them for the national credentialing examination. Students will be credentialed in at least 3 areas recognized by the institute before they are graduated from the Machinist Technology program.

MT 289. Manufacturing Technology Internship. 6 Hours.

Students receive work assignments in approved business and industry settings as the final phase in developing their skills.

MT 293. . 1-6 Hours.**MUSC 111. Introduction to Music. 3 Hours.**

Introductory course designed to develop an appreciation and understanding of the significance of music and to help the student develop intelligent listening habits.

MUSC 112. Great Composers in Performance. 3 Hours.

(Not open to music majors). A study of significant composers and their music. Lectures, in-class musical presentations, concert and rehearsal attendance will: (1) explore relationship of music to the development of society, (2) develop appropriate critical analysis and listening skills.

MUSC 113. American Popular Music. 3 Hours.

Introduction of history and development of American popular music.

MUSC 115. Introduction to History of Jazz. 3 Hours.

An Introduction to jazz, its characteristics, important performers, and their music, including an historical survey with attention to the changing style of the music.

NAS 200. Introduction: Native American Studies. 3 Hours.

Overview of the diverse social and cultural institutions of indigenous tribal societies in North America. Historical materials provide the background for understanding the range of issues affecting contemporary tribal groups.

NSG 100. Introduction to Nursing. 2 Hours.

Introduction to the role of the nurse in modern health care: critical thinking, nursing interventions, professionalism, caring and communication in nursing practice with emphasis on safety, quality, health, culture, ethics, leadership, and health policy.

NSG 211. Health Assessment & Communication. 6 Hours.

PR: NSG 100 and PR or CONC: (BIOL 231 or NBAN 207 or PALM 207 or PSIO 241) with a minimum grade of C- in all. Examination of concepts, principles, and models that guide nursing practice related to physical, psychosocial, spiritual, developmental, cultural, intellectual assessment and communication across the lifespan in the classroom, simulation, and various clinical settings (4 hr. Didactic & 2 hr. Clinical).

NSG 212. Foundations of Nursing Practice. 6 Hours.

PR: NSG 211 and PR or CONC: (BIOL 240 or MICB 200) and NSG 250 with a minimum grade of C- in all. Theories, concepts, principles, and processes that lay the foundation for critical thinking, nursing interventions, communication, professional role and caring in the practice of nursing. Application of the nursing process in classroom, simulation, and clinical experiences (4 hr. Didactic & 2 hr. Clinical).

NSG 213. Transition to Professional Nursing. 6 Hours.

PR: BIOL 230 and BIOL 231 with a minimum grade of C- in both. Concepts, principles, and processes that assist the practical nurse in the transition to baccalaureate level registered nurse education and practice. Focus is on nursing science, nursing process, clinical judgment model, advanced skills, and pharmacology, with application in classroom, skills lab, simulation, and clinical experiences.

NSG 250. Clinical Nursing Pharmacology. 3 Hours.

PR: NSG 211 and PR or CONC: (MICB 200 or BIOL 240) with a minimum grade of C- in all. Principles of pharmacology emphasizing scholarly inquiry and evidence-based reasoning to insure accurate knowledge of and administration of medications to individuals and families across the lifespan. Pharmacological management is analyzed in conjunction with pathophysiology.

NSG 293. Special Topics. 1-6 Hours.

PR: Consent. Investigation of topics not covered in regularly scheduled courses.

NSG 311. Alterations in Adult Health 1. 6 Hours.

PR: NSG 212 and (MICB 200 or BIOL 240) and PR or CONC: NSG 250 with a minimum grade of C- in all. Pathophysiology and holistic nursing care of adults experiencing acute and chronic problems. Use of the nursing process to plan and provide interventions appropriate to health care needs in the clinical setting (3 hr. Didactic & 3 hr. Clinical).

NSG 312. Alterations in Adult Health 2. 6 Hours.

PR: NSG 250 and NSG 311 with a minimum grade of C- in each. Builds on NSG 311 using critical thinking and nursing process in a team based learning format, paired with clinical application, to explore holistic nursing care of adults with acute and chronic health problems (3 hr. Didactic & 3 hr. Clinical).

NSG 320. Child and Adolescent Health. 4 Hours.

PR: NSG 250 and NSG 311 and PR or CONC: NSG 312 with a minimum grade of C- in all. Didactic and clinical experiences focused on human response to alterations in health, developmental needs, and family-centered care specific to pediatric population with emphasis on the professional nursing role, evidence-based reasoning, therapeutic communications, and caring (2.5 hr. Didactic & 1.5 hr. Clinical).

NSG 330. Alterations in Mental Health. 4 Hours.

PR: NSG 212 and PR or CONC: NSG 250 and NSG 311 with a minimum grade of C- in all. Theory and Practice of professional nursing in response to complex alterations in psychosocial function and their impact on individuals, families, and communities. Classroom and clinical experiences (2.5 hr. Didactic & 1.5 hr. Clinical).

NSG 350. Evidence Based Practice and Research. 3 Hours.

PR: NSG 212 and (STAT 201 or STAT 211 or ECON 225) with a minimum grade of C- in each. Theory, concepts, and methods of the research process intended to provide a basic understanding that is necessary for the translation of current evidence into nursing practice.

NSG 360. Ethics and Health Policy. 3 Hours.

PR: NSG 212 and (ENGL 102 or ENGL 103) with a minimum grade of C- in all. Ethical decision-making in health care situations across the lifespan, including palliative and end of life care. Health care policy, legal and regulatory issues are discussed.

NSG 374. School of Nursing Simulation Experience. 2 Hours.

PR: NSG 311 with a minimum grade of C- and for nursing students with second semester Junior or Senior status. Simulated patient care experiences in a safe practice environment.

NSG 400. Spirituality and Health. 3 Hours.

In this course, students will examine the mind/body/spirit connection that occurs in the process of healing and wellness. Theories and practices of relationships between mind/body/spirit will be examined as they impact health/wellness of patients.

NSG 402. Nutrition for Nursing. 2 Hours.

PR: Senior standing in BSN program. Nutrition as a lifestyle factor is often overlooked in healthcare. Dietary intake affects human life and potentially brings on disease or helps to prevent or cure it. It is essential for nurses to understand how food and nutrients fit within lifestyle, culture, and therapeutic plans of care.

NSG 404. Tobacco Treatment. 2 Hours.

PR: Senior standing in BSN program. Tobacco use leads to various health disparities, including cancer, lung disease, cardiovascular issues, and oral problems, and is a leading cause of preventable death around the world. This course provides an overview of content needed for students to learn effective, evidence-based strategies to promote tobacco cessation. The course content also prepares the student for certification as a tobacco treatment specialist.

NSG 410. Maternal Infant Nursing & Women's Health Care. 4 Hours.

PR: NSG 312 and NSG 320 and PR or CONC: NSG 411 with a minimum grade of C- in all. Human response to normal and abnormal changes in health status across the female lifespan and adaptations of the childbearing family. Provision of the holistic nursing care to women and childbearing families in the clinical area (2.5 hr. Didactic & 1.5 hr. Clinical).

NSG 411. Nursing in Complex Community Systems. 7 Hours.

PR: NSG 310 and NSG 312 and NSG 320 and NSG 350 with a minimum grade of C- in each. Comprehensive theoretical introduction to community health nursing paired with clinical experience focused on promoting health and preventing disease in multiple populations. Culminates in a capstone project that addresses an identified community health need (3 hr. Didactic & 4 hr. Clinical).

NSG 412. Leadership in Complex Systems. 7 Hours.

PR: Senior status in Nursing and must be taken in the last semester of the program. Development of leadership and management skills necessary for professional nursing practice and interventions supporting multiple patients in acute-care complex systems. Classroom experiences paired with 225 hours of precepted leadership experience (2 hr. Didactic & 5 hr. Clinical).

NSG 435. Cardiology for Nursing. 2 Hours.

PR: NSG 312 with a minimum grade of C- and senior standing in BSN Program. Introduction to the interpretation and treatment of cardiac arrhythmias.

NSG 460. Care of the Critically Ill Patient. 4 Hours.

PR: NSG 310 and NSG 312 and NSG 320 and NSG 450 with a minimum grade of C- in each. Focuses on the professional nursing role in supporting individuals and families experiencing complex physiological alterations in health. Paired with clinical experiences supporting individuals and families in critical care settings (3 hr. Didactic & 1 hr. Clinical).

NSG 470. Advanced Life-Saving Technologies. 2 Hours.

PR: Senior standing. This course will introduce students to advanced life-saving technologies and roles and responsibilities of intensive care team members.

NSG 478. The Role of the Nurse in the Patient Experience. 2 Hours.

PR: NSG 212 with a minimum grade of C-. Didactic experience focused on exploring the nurse's role in the patient's and family's healthcare experience.

NSG 480. Core Concepts in Gerontological Nursing. 2 Hours.

PR: NSG 211 and NSG 212 with a minimum grade of C- in each and Junior or Senior standing. Examination of patient specific concepts, nursing assessments, interventions, and models of care that guide nursing practice related to holistic care of the older adult.

NSG 481. Cardiac Nursing. 2 Hours.

PR: NSG juniors and seniors. Introduction to the interpretation and treatment of cardiac arrhythmias.

NSG 482. Palliative Care Nursing. 2 Hours.

Focus is on the care of patients with chronic non-curable conditions across the life span. The course analyzes the definition of palliative care and defines the role of hospice as a part of palliative care. Cultural sensitivity and communication with palliative care patients and their families is emphasized.

NSG 483. Holistic and Integrative Nursing. 2 Hours.

PR: NSG 212 with a minimum grade of C-. Theory and principles of holistic nursing and an introduction to alternative/complementary health therapies. Experiential learning and application of content to clinical setting will be explored.

NSG 484. Care of the Diabetic Patient. 2 Hours.

PR: Consent. In-depth analysis of nursing care of the patient with diabetes.

NSG 485. Children With Complex Health Needs. 2 Hours.

PR: NSG 320 with a minimum grade of C-. The nursing care of children with complex acute and chronic health problems with a focus on decision-making using a case study problem based learning approach.

NSG 486. NCLEX Review. 1 Hour.

PR: Senior status in Nursing and must be taken in the last semester of the program. Focuses on achievement of professional success by preparing for RN licensure. Preparation for NCLEX will be the focus of this by enhancing NCLEX testing skills.

NSG 487. Movies and Mental Health. 2 Hours.

Representations of psychopathological states in films within the context of contemporary social issues such as stigma and discrimination. Examination of personal biases towards psychiatric illnesses and how biases interfere with advocacy roles of practicing nurses.

NSG 495. Independent Study. 1-6 Hours.

Faculty supervised study of topics not available through regular course offerings.

ORIN 151. Choosing a Major and Career. 1 Hour.

Provide guidance and clarity to students that are unsure about a major and career. Course addresses first time freshman undecided and those students that discover that their initial major or career choice does not match their personal and professional aspirations. Students will be guided through a formal assessment of their personal characteristics, consider possible career choices and identify associated majors.

ORIN 152. Learning Career Skills. 1 Hour.

To provide students with information and resources necessary to begin building a strong foundation toward "Career Readiness" and an understanding of the importance of developing a comprehensive career plan. Students will be introduced to the advantages of developing an effective resume and associated career documents and the importance of beginning to define their career goals.

ORIN 251. Preparing for Success. 1 Hour.

Inform students of the various opportunities available to them through co- and extra-curricular activities that best meet the needs of their individual career planning and professional development. Students will evaluate and select opportunities in study abroad, leadership, professional organizations and service learning that will improve their competitiveness as they prepare for the job search process.

ORIN 252. Professional Development. 1 Hour.

Provide students with knowledge, skills and the ability to successfully launch a comprehensive job search. Students will learn how to search for potential employment opportunities and to utilize the latest available job search resources. Understanding the importance of professional branding, career development, and financial planning to meet life-long goals will also be covered.

ORIN 270. Introduction to Health Careers. 1 Hour.

A study of careers in the health professions. Readings, lectures, and discussions by professionals in many health fields will include the educational requirements for and functions of their respective health professions. (Pass/fail grading only.).

OSTC 107. Medical Terminology 1. 3 Hours.

Introduction to medical terminology as it applies to the various body systems and practical application in medical office procedures.

OSTC 108. Medical Terminology 2. 3 Hours.

PR:OSTC 107. Continuation of OSTC 107 with an emphasis in medical office procedures.

OSTC 113. Basic Formatting. 3 Hours.

PR: Minimum typing speed: 30 wpm. Designed for students who have had previous training in keyboarding. Emphasis on letter formatting styles, manuscript formatting, tables, envelopes, and business forms.

OSTC 115. Formatting and Editing. 3 Hours.

PR: Minimum typing speed: 30 wpm. Designed for students who have had previous training in keyboarding. Emphasis on document formatting and editing to include proper use of grammar, punctuation, spelling, capitalization and number usage.

OSTC 119. Office Training. 3 Hours.

PR:OSTC 113 or consent of instructor. Open to Office Technology Majors only A course combining theory with the actual practice embodied in the courses above. Hands on experience is stressed on various machines in the department-- dictating and transcribing equipment; facsimile machine; and photocopy machines. Office grooming, office etiquette, different types of office work, and other topics pertinent to an office are studied and discussed.

OSTC 221. Word Processing. 3 Hours.

PR:OSTC 113 or consent of the instructor. This course provides study in the theories and practical applications of word processing for employment or home use.

OSTC 222. Office Automation. 3 Hours.

PR:CS 101 or CIS 100 and OSTC 113 or consent of the instructor. This course provides an evolutionary perspective on today's changing office. Topics include information flow and management, communications, replication, and records management.

OSTC 223. Directed Office Experience. 3 Hours.

This course is open to students in the BTEC and OSTC programs during the final semester of study or with advisor permission. Students are placed in appropriate work sites in the community and surrounding area to participate in an on-the-job training experience. (A minimum of 56 hours is required.).

OSTC 240. Fundamentals of Desktop Publishing. 3 Hours.

Current hardware and software used in desktop publishing (Microsoft's Publisher). Students will complete projects developed to train the user in basic hardware and software applications.

OSTC 250. Business Grammar Applications. 3 Hours.

Punctuation, spelling, plurals, capitalization, numbers, word usage, proofreading. Proper use of office reference manual.

OSTC 252. Interpersonal Relations. 3 Hours.

Meeting management, problem solving, delegation, conflict resolution motivation, job application process, and professional ethics.

PALM 200. Medical Terminology. 3 Hours.

General medical terminology with emphasis on clinical and anatomic pathology terminology.

PE 101. Badminton. 1 Hour.

Introduction to beginning knowledge and skills in badminton. (May be repeated for a maximum of 2 credit hours).

PE 103. Beginning Basketball. 1 Hour.

This course is designed to provide historical background, rules and regulations, and fundamental skills. These will be accomplished through instruction, drills, games and class team play. (May be repeated for a maximum of 2 credit hours).

PE 107. Basketball Conditioning/Weight Training. 1 Hour.

(May be repeated for a maximum of 2 credit hours). Introduction to basic conditioning and weight training techniques for basketball.

PE 108. Football Conditioning/Weight Training. 1 Hour.

(May be repeated for a maximum of 2 credit hours). Introduction to basic conditioning and weight training techniques for football.

PE 109. Baseball Conditioning/Weight Training. 1 Hour.

(May be repeated for a maximum of 2 credit hours). Introduction to basic conditioning and weight training techniques for baseball.

PE 110. Military Physical Conditioning. 1 Hour.

(May be repeated for a maximum of 2 credit hours).

PE 115. Volleyball Conditioning/Weight Training. 1 Hour.

(May be repeated for a maximum of 2 credit hours). Introduction to basic conditioning and weight training techniques for volleyball.

PE 121. Zumba. 1 Hour.

(May be repeated for a maximum of 2 credit hours). Fuses various fast and slow Latin rhythms and movements with resistance training to create dynamic fitness routine, balance, and introduces breathing techniques to increase energy and focus.

PE 122. Billiards. 1 Hour.

(May be repeated for a maximum of 2 credit hours). Introduction to beginning knowledge and skills in billiards.

PE 124. Fitness Walking. 1 Hour.

(May be repeated for a maximum of 2 credit hours). This course provides a supervised walking program in a safe, enjoyable environment. Classes meet ACSM guidelines for safe, effective classes. Includes warm-up, cardiovascular segment, cool-down, and stretch.

PE 125. Group Fitness. 1 Hour.

(May be repeated for a maximum of 2 credit hours). Introduction to beginning knowledge and skills in aerobics.

PE 130. Flag Football. 1 Hour.

Introduction to beginning knowledge and skills in flag football. (May be repeated for a maximum of 2 credit hours).

PE 145. Karate. 1 Hour.

(May be repeated for a maximum of 2 credit hours). Introduction to beginning knowledge and skills in karate.

PE 146. Self-Defense. 1 Hour.

(May be repeated for a maximum of 2 credit hours). Introduction to beginning knowledge and skills in self-defense.

PE 149. Tae Kwon Do. 1 Hour.

(May be repeated for a maximum of 2 credit hours). Introduction to beginning knowledge and skills in tae kwon do.

PE 152. Beginning Kickboxing. 1 Hour.

(May be repeated for a maximum of 2 credit hours). An introduction to the popular martial art and competitive sport of kickboxing. Emphasis is given to building flexibility and strength, the foundations of powerful kicking and punching techniques.

PE 153. Mind-Body Fitness. 1 Hour.

(May be repeated for a maximum of 2 credit hours). This course introduces the student to basic yoga techniques that can be practiced as a way of developing a wide variety of sports.

PE 157. Slow Pitch Softball. 1 Hour.

(May be repeated for a maximum of 2 credit hours). Introduction to beginning knowledge and skills in slow pitch softball.

PE 159. Soccer. 1 Hour.

Introduction to beginning knowledge and skills in soccer. (May be repeated for a maximum of 2 credit hours).

PE 160. Beginning Tennis. 1 Hour.

(May be repeated for a maximum of 2 credit hours). Introduction to beginning knowledge and skills in tennis.

PE 164. Weight Training. 1 Hour.

Introduction to beginning knowledge and skills in weight training. (May be repeated for a maximum of 2 credit hours).

PE 165. Conditioning. 1 Hour.

Introduction to beginning knowledge and skills in conditioning. (May be repeated for a maximum of 2 credit hours).

PE 170. Volleyball. 1 Hour.

Introduction to beginning knowledge and skills in volleyball. (May be repeated for a maximum of 2 credit hours).

PE 182. Bowling. 1 Hour.

(May be repeated for a maximum of 2 credit hours). Introduction to beginning knowledge and skills in bowling.

PE 187. Golf. 1 Hour.

(May be repeated for a maximum of 2 credit hours). The course is designed to introduce students to the rules, skills, and strategies involved in golf.

PE 201. Pilates. 1 Hour.

(May be repeated for a maximum of 2 credit hours). Introduces students to basic techniques, postures, and controlled breathing designed to build core strength, improve flexibility, and increase physical fitness in a non-competitive atmosphere.

PE 202. Intermediate Yoga. 1 Hour.

(May be repeated for a maximum of 2 credit hours). PR: PE 153 or previous yoga experience. Emphasizes poses which build a combination of strength, flexibility, balance, and introduces breathing techniques to increase energy and focus. Moderately paced for students with previous yoga practice.

PE 223. Net and Wall Games. 1 Hour.

This teaching games for understanding (TGfU) course is designed to introduce the students to the rules, skills, and strategies involved in playing net and wall games.

PET 101. Games in American Culture. 3 Hours.

Examination of how the social history of a variety of American physical games has impacted their development and conversely how the games have impacted American society.

PET 124. Human Body: Structure and Function. 2 Hours.

Overview of the structure and function of the organ systems in the human body. Topics covered include the skeletal, muscular, nervous, digestive, respiratory, and cardiovascular systems.

PET 125. Principles of Human Movement. 2 Hours.

PR: PET 124. This course is designed to introduce prospective physical educators to the principles of human movement. Pre-requisite(s) and/or co-requisite(s) may differ on regional campuses.

PET 167. Introduction to Physical Education. 3 Hours.

Overview of physical education teaching profession including career opportunities, critical current issues/ trends, professional standards, and the professional organizations.

PET 175. Motor Development. 2 Hours.

To examine changes in human movement behavior across the lifespan, the processes that underline these changes, and the factors that contribute to those changes.

PET 244. Motor Learning and Performance. 2 Hours.

Introduction to principles related to teaching, learning, and performance of motor skills. Emphasizes the application of knowledge to teaching and learning strategies for motor-skill acquisition.

PET 276. Adapted Physical Education. 2 Hours.

Examines legal issues and current trends in adapted physical education, and develops differential instruction strategies for designing, implementing and evaluating instructional programs for students' individual needs in schools and specialized settings, emphasizing disability characteristics, definitions, functions, and behaviors.

PHIL 100. Problems of Philosophy. 3 Hours.

An elementary examination of such philosophical problems as the mind-body problem, the existence of God, freedom and determinism, and the nature of persons and their knowledge.

PHIL 140. Historical Introduction to Philosophy. 3 Hours.

An introductory survey of the major philosophers and philosophical movements from ancient times to the present.

PHIL 170. Introduction to Critical Reasoning. 3 Hours.

An elementary study of critical thinking and reasoning. For students who want to improve their skills in recognizing fallacious patterns of reasoning, constructing acceptable arguments, and criticizing faulty lines of reasoning.

PHIL 331. Health Care Ethics. 3 Hours.

PR: 3 hours philosophy or pre-med or health sciences student. Topics: Clinician- patient relationship, life-sustaining treatment, physician assisted death, physician-nurse conflicts, confidentiality, research, reproductive technology, abortion, maternal/fetal conflicts, genetics, rationing, and access.

PHYS 100. Introductory Physics Corequisite. 1 Hour.

PR: Corequisite of PHYS 101. This is a co-requisite support course associated with PHYS 101. This course reinforces basic learning and study skills along with a review of trigonometric functions and their graphs and applications. Based on the criteria defined by the Physics Department, some students are required to register for this course based on placement.

PHYS 101. Introductory Physics 1. 4 Hours.

PR: MATH 124 or MATH 126 or MATH 128 or MATH 129 or MATH 150 or MATH 153 or MATH 154 or MATH 155 or MATH 156 or satisfactory performance on MATH departmental placement exam and Coreq: PHYS 101L. The fundamental philosophy and principles of physics are applied to studies of mechanics, sound, heat, and thermodynamics through demonstrations, problems, and experiments. Pre-requisites and/or co-requisites may differ on regional campuses.

PHYS 101L. Introductory Physics 1 Laboratory. 0 Hours.

PR: Corequisite of PHYS 101. Introductory Physics 1 - PHYS 101 Laboratory.

PHYS 102. Introductory Physics 2. 4 Hours.

PR: PHYS 101 and PHYS 101L and Coreq: PHYS 102L. The fundamental philosophy and principles of physics are applied to studies of electricity, magnetism, optics, light, and atomic and nuclear physics through demonstrations, problems, and experiments. Pre-requisite(s) and/or co-requisite(s) may differ on regional campuses.

PHYS 102L. Introductory Physics 2 Laboratory. 0 Hours.

PR: Corequisite of PHYS 102. Introductory Physics 2 - PHYS 102 Laboratory.

PHYS 105. Conceptual Physics. 4 Hours.

PR: Corequisite of PHYS 105L. Basic principles of physics and their relationship to our modern technological society. Major topics include properties of matter, electricity, optics, motion, heat and temperature, and energy. Nonmathematical approach emphasized.

PHYS 105L. Conceptual Physics Laboratory. 0 Hours.

PR: Corequisite of PHYS 105. Conceptual Physics - PHYS 105 Laboratory.

PHYS 111. General Physics 1. 4 Hours.

PR: MATH 155 or PR or CONC: MATH 154 with a minimum grade of C- in all and Coreq: PHYS 111L. Survey of classical mechanics, thermodynamics and waves.

PHYS 111L. General Physics 1 Laboratory. 0 Hours.

PR: Corequisite of PHYS 111. General Physics 1 - PHYS 111 Laboratory.

PHYS 112. General Physics 2. 4 Hours.

PR: PHYS 111 and PHYS 111L and Coreq: PHYS 112L. Survey of electricity, magnetism, and optics.

PHYS 112L. General Physics 2 Laboratory. 0 Hours.

PR: Corequisite of PHYS 112. General Physics 2 - PHYS 112 Laboratory.

PLSC 206. Principles of Plant Science. 4 Hours.

PR: Corequisite of PLSC 206L. Anatomy, morphology, and physiology of higher plants. Study of growth and development of economically important plants, their culture, and products.

PLSC 206L. Principles of Plant Science Laboratory. 0 Hours.

PR: Corequisite of PLSC 206. Principles of Plant Science - PLSC 206 Laboratory.

POLS 102. Introduction to American Government. 3 Hours.

General survey of American national government and politics.

POLS 103. Global Political Issues. 3 Hours.

Analysis of issues in post-cold war international politics, ranging from traditional major power diplomacy and intervention to the newer problems of economic interdependence and development, human rights, population pressures on limited resources, and the environment.

POLS 210. Law and the Legal System. 3 Hours.

Introductory course on the role of law in the political system. Includes a survey of subfields in United States law and an examination of participants, processes, and policy making in the United States legal system.

POLS 220. State and Local Government. 3 Hours.

The legal basis, structure, politics and operation of state and local governments, in the content of the American federal system.

POLS 250. Introduction to Comparative Politics. 3 Hours.

An introduction to the political and governmental systems of industrialized and developing countries. Focuses on approaches to comparative political study, political cultures and participation, and government structures, processes, and policy performance.

POLS 260. Introduction to International Relations. 3 Hours.

Theories and concepts in international politics and their application to contemporary world politics.

POLS 311. Political Parties & Elections. 3 Hours.

Parties and elections in America; emphasis on nomination and general election processes, campaigns, the mass media, campaign finance, voting, the electoral college, and parties in government.

POLS 313. American Constitutional Law. 3 Hours.

The role of the Constitution in the American political system. Topics include the political concept of constitutionalism; the role of the Supreme Court in the political process; division of powers among the three branches of government; and the constitutional relation between the national government and the states.

POLS 353. Western Democratic Governments. 3 Hours.

Cross-national and/or comparative based analysis of selected western democracies, such as Canada, Great Britain, France, Italy, and the European Union.

POLS 400. Terrorism and National Security. 3 Hours.

Basic overview of terrorism tactics and national security initiatives.

PSIO 241. Elementary Physiology. 4 Hours.

PR: College biology and chemistry, or consent. (For undergraduate students in paramedical sciences and nursing students on regional campuses.) Systematic presentation of basic concepts.

PSYC 101. Introduction to Psychology. 3 Hours.

Survey of general psychology.

PSYC 201. Psychology as a Profession. 1 Hour.

PR: PSYC 101. Orientation to opportunities for experience, employment, and graduate and professional training in psychology.

PSYC 203. Research Methods and Analysis 1. 3 Hours.

PR: PSYC 101 with a minimum grade of C- and (MATH 124 or higher with a minimum grade of D-; or satisfactory placement by MATH ACT, SAT or ALEK) and Coreq: PSYC 203L. Research methods and data analysis utilizing descriptive and correlational designs in developmental, experimental, clinical, and social psychology in the laboratory and the natural environment.

PSYC 203L. Research Methods and Analysis 1 Laboratory. 0 Hours.

PR: Corequisite of PSYC 203. Research Methods and Analysis 1 - PSYC 203 Laboratory.

PSYC 204. Research Methods and Analysis 2. 3 Hours.

PR: PSYC 203 and PSYC 203L with a minimum grade of C- and Coreq: PSYC 204L. Research methods and data analysis utilizing experimental and quasi-experimental designs in developmental, experimental, clinical, and social psychology in the laboratory and the natural environment.

PSYC 204L. Research Methods and Analysis 2 Laboratory. 0 Hours.

PR: Corequisite of PSYC 204. Research Methods and Analysis 2 - PSYC 204 Laboratory.

PSYC 231. Leadership and Human Relations. 3 Hours.

PR: PSYC 101. Concentrates on principles of psychology that can be applied to improving relations with others as well as being a more effective leader. Pragmatic orientation includes using the principles to solve problems in relationships, in small organizations, and in large systems.

PSYC 232. Sex Roles and Behavior. 3 Hours.

PR: PSYC 101. Relates sex-typed behavior to physiological, social, and cultural processes. Current social concerns such as rape and abortion legislation, child care, and expanded career options for both sexes are examined from a psychological perspective.

PSYC 233. Psychology of Cinema. 3 Hours.

This course examines film from a psychological perspective. Areas of focus include the art and science of film production, and the impact of cinema on the individual and society. Analysis of psychological themes is emphasized.

PSYC 241. Introduction to Human Development. 3 Hours.

PR: PSYC 101. Survey of human psychological development across the life span with emphasis on change in biological, cognitive, and social-emotional processes. Special attention given to theoretical, conceptual, methodological, and practical issues.

PSYC 251. Introduction to Social Psychology. 3 Hours.

PR: PSYC 101. Examination of social interaction and behavior from a psychological perspective. Topics include: attraction, social perception and cognition, attitudes and attitude change, social influence and group process, prosocial behavior and aggression, cultural influence, and prejudice.

PSYC 281. Introduction to Psychological Disorders. 3 Hours.

PR: PSYC 101. Introduction to major categories of psychological and behavioral disorders, including mood disorders, anxiety disorders, substance-related disorders, psychotic disorders, and personality disorders. Etiology, prevention, and treatment will be discussed.

PSYC 343. Child and Adolescent Development. 3 Hours.

PR: PSYC 241 and junior or senior standing. Theory and research on major psychological processes in childhood and adolescence; maturation, personality, socialization, sensory, and cognitive development.

PSYC 345. Adulthood and Aging. 3 Hours.

PR: PSYC 241 and junior or senior standing. Psychological issues in the study of adulthood, with an emphasis on the characteristics of older adults. Topics include the psychosocial and biological context of aging, cognitive and personality changes from early to late adulthood, psychopathology in later life, dementia, issues in caregiving, and death and dying.

PSYC 365. Forensic Psychology. 3 Hours.

PR: PSYC 101 and junior or senior standing. Surveys role of psychology in the legal system. Issues addressed include: insanity, child custody, sexual abuse, police fitness, eye witness and jury selection.

PSYC 382. Exceptional Children. 3 Hours.

PR: PSYC 241 and junior or senior standing. Exceptional mental retardation or advancement; organic disabilities having behavioral consequences, such as cerebral palsy or deafness; and behavior disorders.

PSYC 490. Teaching Practicum. 1-3 Hours.

PR: Consent. Teaching practice as a tutor or assistant.

PSYC 491. Professional Field Experience. 1-18 Hours.

PR: Consent. (May be repeated up to a maximum of 18 hours.) Prearranged experimental learning program, to be planned, supervised, and evaluated for credit by faculty and field supervisors. Involves temporary placement with public or private enterprise for professional competence development.

RDNG 403. Literature for Children. 3 Hours.

A survey of children's literature, with attention to historical development as well as current trends. Emphasizes selection, critical evaluation, and utilization of literary materials for developmental, recreational, and curriculum needs. Appropriate media included.

RELG 102. Introduction to World Religions. 3 Hours.

This course explores five of the most widely practiced world religions; Judaism, Christianity, Islam, Hinduism, and Buddhism. Students are introduced to the history and basic tenets of each faith.

RELG 303. Studies in Christian Scripture. 3 Hours.

This course explores the origin and development of the Christian Bible. The historical, cultural, and religious settings of the texts, as well as their theological intent, will be examined.

RPTR 142. Introduction to Recreation, Parks and Tourism. 3 Hours.

This course explores the meanings and roles of leisure and recreation in society and in your life. Topics include an overview of the field of recreation, leisure, and tourism: foundational concepts and philosophy, history, impacts, management, and current issues. This course also covers career planning and professional development opportunities.

RPTR 242. Environmental and Cultural Interpretation. 3 Hours.

This course is about people, communication and natural resource management. It focuses on theory and application of communication methods for natural resource settings and topics, including communication of technical information to lay publics.

SAGE 141. Introduction to Horticulture and Agronomy. 3 Hours.

Hands-on introduction of concepts for crops and soils; evaluation of entrepreneurial benefit for farm income; small farm enterprise; basics of crop needs; and crop scheduling.

SAGE 215. Agricultural Marketing. 3 Hours.

PR: ARE 150. Broad view of marketing; food, timber, product markets and consumption; marketing functions and institutions; practical knowledge and application capabilities for the marketing of agricultural products; exploration of current marketing methods for agricultural products and services; development of efficient, effective marketing schemes and exploration of value-added products.

SAGE 231. Innovation Exploration Seminar. 1 Hour.

Exploration of current issues in the production agriculture arena; agricultural innovations, environmental farming considerations, farming techniques and food production issues producing a preliminary farm enterprise plan and business documents.

SAGE 240. Applied Horticulture and Agronomy. 3 Hours.

PR: SAGE 141. Building on the information learned in SAGE 141, evaluation of the entrepreneurial benefits to the farmer based on; soil management, the harvesting of crops, post-harvest handling methods, point of sale condition, processing and valued added aspects of horticultural and agronomic crops.

SAGE 260. Applied Animal Husbandry. 3 Hours.

PR: A&VS 251. A hands-on study of the production of animals and animal products. Development of animal farming best management plans based on nutrition, physiology, genetics, hygiene, physical environment, economics and daily work requirements.

SAGE 270. Woodlot Management. 3 Hours.

An introduction to the concepts of forest management, with a focus on small woodlots; many facets of the management of forest acreage; and lab-based training on basic forestry and forest management related field methods and data analysis.

SAGE 280. Principles of Ag Entrepreneurship. 3 Hours.

Exploration of the creative processes used by entrepreneurs and of the skills needed to successfully operate an entrepreneurial venture in the agricultural and forestry arenas.

SAGE 312. Integrated Pest Management. 3 Hours.

In depth exploration of crop/animal pest and disease management, sanitation in disease prevention, identification of symptoms, current treatments of disease, insect identification methods, insect scouting, insect control methods, weed identification and beneficial organisms for sustainable production.

SAGE 318. Agricultural Project Management. 3 Hours.

This course provides an understanding of the processes, tools, and practical knowledge needed to successfully manage agricultural projects. Students apply concepts to manage a typical project found in industry.

SAGE 386. Junior Farm Work Experience 1. 3 Hours.

This course will guide the development of the business planning for agriculture or forestry enterprises. With the in class problem-solving exercises, the enterprises will be evaluated for their human resources, strategic objectives and financial considerations. By the end of the course the business description section of personal business plan will be completed.

SAGE 387. Junior Farm Work Experience 2. 3 Hours.

PR: SAGE 386. This course will guide the development of the business planning for agriculture or forestry enterprises. With the in-class problem-solving exercises, enterprise vision statements, mission statements and goals will be developed. The enterprise operations section of their personal farm business plan will be developed.

SAGE 446. Advanced Agriculture & Forestry Entrepreneurship. 3 Hours.

PR: BUSA 310 or SAGE 280. This course will build on concepts covered in SAGE 280 or BUSA 310 to discuss business formation and how the development of the entrepreneurial mindset can lead to the successful formation and operation of agriculture and forestry enterprises.

SAGE 451. Value-added Agriculture/Forestry Enterprises. 3 Hours.

PR: SAGE 446. The study of agriculture and forestry enterprises where you capture value or create value by marketing a unique product, filling a market niche, simplifying the supply chain, providing a service, or lowering costs.

SAGE 486. Senior Farm Work Experience 1. 3 Hours.

PR: SAGE 387. This course will guide the development of creative and entrepreneurial business planning for agriculture or forestry enterprises. With the in-class creativity and brain-storming activities the students will develop their enterprise strategic plan. By the end of the course the financial section of personal business plan will be completed.

SAGE 487. Senior Farm Work Experience 2. 3 Hours.

PR: SAGE 486. This course will guide the development of creative and entrepreneurial business planning for agriculture or forestry enterprises. With in-class creativity and brain-storming activities the students will develop their specialized test market(s) to match their specific enterprise. By the end of the course the student's personal farm business plan will be completed.

SEP 272. Introduction to Sport and Performance Psychology. 3 Hours.

Students are introduced to the roles, training, and ethical standards of sport and performance psychology, establish a foundation of knowledge on the psychological factors that influence performance in sport and other contexts, and assess strengths and challenges of mental performance and mental skills training.

SEP 371. Sport in American Society. 3 Hours.

Students will explore, critically analyze, and develop strategies for addressing, major social issues affecting sport in American society.

SEP 373. African Americans in Sports. 3 Hours.

Sociocultural and historical overview of the contributions of African Americans in sport in America.

SEP 385. Performance Psychology of Teams and Groups. 3 Hours.

Students will explore social psychological theory and research to understand team and group performance in sport and other performance contexts. Students will apply course content to practical situations important to students' professional and personal lives.

SM 167. Introduction to Sport Management. 3 Hours.

Overview of the sport management profession including career opportunities, critical current issues, trends, professional standards and the professional organizations.

SM 321. Esports Governance. 3 Hours.

This course provides an in-depth look at the governance and structure of esports. Students will examine esports leagues, teams, gaming publishers, and current events happening in esports with a focus on the law and ethical adherence to rules governing these competitions.

SM 322. Esports Marketing. 3 Hours.

Students in this course will be given an overview of the esports industry and its connections to the broader entertainment and communication industries. The course will explore the relationship between individual talent (from players to influencers) to professional organizations and the esports companies and how promotions, sponsorship, and marketing strategies can be developed to the benefit of all the stakeholders.

SOC 101. Introduction to Sociology. 3 Hours.

Basic course intended to develop a perspective about the nature of social processes and the structure of society.

SOC 207. Social Problems in Contemporary America. 3 Hours.

Sociological analysis of the causes, effects and approaches to preventing and reducing social problems in American society.

SOC 221. Families and Society. 3 Hours.

Historical comparative approach to changing structure and functions of the family institution. Effect of economic, demographic, and cultural changes on relationships, gender roles, marriage, childcare; variations by socioeconomic status, race, ethnicity, gender, sexual orientation.

SOC 235. Race and Ethnic Relations. 3 Hours.

Racial and ethnic groups are examined in terms of their history, transformation over time, and the contemporary conditions and issues they face. Emphasis is on prejudice as well as systemic racism.

SOC 312. Death and Dying. 3 Hours.

This course explains the issues and problems associated with death in American society. Topics such as changing attitudes, grief, funeral practices, life after death, the dying patient, and widowhood are presented from a variety of perspectives.

SOC 323. Sociology of Rural Life. 3 Hours.

PR: SOC 101 or consent. Social aspects of rural living. Characteristics of rural population, social structure, and institutional arrangements: family, community, education, religion, recreation, health, welfare, and local government.

SOC 495. Independent Study. 1-6 Hours.

Faculty supervised study of topics not available through regular course offerings.

SOCA 495. Independent Study. 1-6 Hours.

Faculty supervised study of topics not available through regular course offerings.

SOWK 147. Human Diversity. 3 Hours.

(Must be completed before applying to the major.) Covers a range of diverse populations especially those historically subjected to oppression and social and economic injustice. Addresses the causes and effects of institutionalized forms of oppression.

SOWK 151. Introduction to Social Work. 3 Hours.

A historical and philosophical overview of Social Work as a profession and field of study. Using case studies and real-world examples, this course examines the history of social institutions and their effectiveness in alleviating social problems including topics related to historically oppressed and marginalized populations, changes in the American family, and historical and current trends related to various social services.

SOWK 300. Social Welfare Policy and Services 1. 3 Hours.

PR: SOWK 151. Review of current and historical perspectives on the social welfare institution. Includes philosophical and ideological factors that influence U.S. social welfare policy and services.

SOWK 310. Social Welfare Policy and Services 2. 3 Hours.

PR: SOWK 300. Explores the social welfare policy-making process. Analyzes current social welfare programs and possible reforms, policy responses to social issues, and strategies for shaping and influencing policy and their impact on vulnerable populations.

SPAN 101. Elementary Spanish 1. 3 Hours.

PR: Score of S1 on placement test or no prior study of the language or departmental consent. Introduction to the sound and writing systems of the language with emphasis on listening, speaking, reading and writing within an authentic cultural context. (Course presumes no prior knowledge of the language.)

SPAN 102. Elementary Spanish 2. 3 Hours.

PR: SPAN 101 or score of S2 on placement exam. Continuation of SPAN 101. Introduction to the sound and writing systems of the language with emphasis on listening, speaking, reading, and writing within an authentic cultural context.

SPAN 203. Intermediate Spanish 1. 3 Hours.

PR: SPAN 102 or score of S3 on placement exam. Continuation of SPAN 102.

SPAN 204. Intermediate Spanish 2. 3 Hours.

PR: SPAN 203 or score of S4 on placement exam. Foundation for advanced study of Spanish. Emphasis on oral and written communication.

SPAN 293. Special Topics. 1-6 Hours.

PR: Consent. Investigation of topics not covered in regularly scheduled courses.

SPAN 495. Independent Study. 1-6 Hours.

Faculty supervised study of topics not available through regular course offerings.

ST 101. Surgical Technology 1. 3 Hours.

PR or CONC: ST 150 with a minimum grade of C-. Introduction to the surgical environment, the history of surgery, and the legal, ethical, moral and psychological responsibilities of a surgical technologist. Principles of asepsis, safety and the importance of teamwork, and common surgical and diagnostic procedures will also be introduced.

ST 102. Surgical Technology 2. 4 Hours.

PR: ST 101 with a minimum grade of C- and PR or CONC: ST 155. Continuation of ST 101. Emphasis placed on orthopedic, plastic and reconstructive, genitourinary and vascular surgical skills.

ST 120. Surgical Pharmacology. 3 Hours.

PR: ST 101 and ST 150 with a minimum grade of C- in each. Introduction to the medication process and proper drug handling related to surgical technology. Topics will include selection of the correct drug, measurement and mixing, distribution and dispensing, administration, and assessment of the patient with documentation.

ST 150. Surgical Technology Clinical 1. 4 Hours.

PR or CONC: ST 101 with a minimum grade of C-. Survey and laboratory practice of basic surgical skills, asepsis and sterile technique.

ST 155. Surgical Technology Clinical 2. 4 Hours.

PR: ST 101 and ST 150 with a minimum grade of C- in each and PR or CONC: ST 102. Continuation of ST 150. More advanced aseptic and sterile technique practices. Students will complete 40 clinical cases.

ST 201. Surgical Technology 3. 4 Hours.

PR: ST 102 and ST 155 with a minimum grade of C- in each and PR or CONC: ST 250. This is a continuation of ST 102. The course will build upon the knowledge base, skill level and expertise introduced in ST 102 to include more intricate and complicated surgeries and surgical techniques.

ST 202. Surgical Technology 4. 4 Hours.

PR: ST 201 and ST 250 with a minimum grade of C- in each and PR or CONC: ST 255. Students continue to build on their knowledge of advanced surgical procedures and prepare for the surgical technologist certification exam.

ST 250. Surgical Technology Clinical 3. 8 Hours.

PR: ST 102 and ST 155 with a minimum grade of C- in each and PR or CONC: ST 201. This course is a continuation of ST 155. It will introduce and refine additional aseptic and sterile technique practices during the completion of clinical cases.

ST 293. Special Topics. 1-6 Hours.

PR: Consent. Investigation of topics not covered in regularly scheduled courses.

STAT 101. Elementary Statistics Corequisite. 1 Hour.

PR: Corequisite of STAT 211. This is a co-requisite support course associated with STAT 211. This course reinforces basic learning and study skills along with foundational mathematical skills necessary to succeed in elementary statistics. Based on the criteria defined by the Math Department, some students are required to register for this course based on placement.

STAT 111. Understanding Statistics. 3 Hours.

Introduction to basic concepts and ideas of statistics. Methodologies and case studies to prepare students to understand the use of statistics in the mass media and professional publications in their major field of study. Not open to students who have earned credit for STAT 211 or STAT 215.

STAT 211. Elementary Statistical Inference. 3 Hours.

PR: MATH 124 or higher, or advanced placement. Basic concepts of descriptive and inferential statistics: descriptive measures, random variables, sampling distributions, estimation, tests of hypotheses, chi-square tests, regression and correlation.

STAT 215. Introduction to Probability and Statistics. 3 Hours.

PR: MATH 156. Probability, random variables, discrete and continuous probability distributions, joint probability distributions, and expected value. The central limit theorem. Point and interval estimation and tests of hypotheses. Chi-square tests, linear regression, and correlation.

STCM 315. Strategic Advertising and Public Relations Writing. 3 Hours.

PR: (ADPR 215 or ADV 215 or PR 215 or STCM 215) and (JRL 215 or MDIA 215) with a minimum grade of C- in each. This class provides exposure to and practice in developing the kinds of writing required in advertising and public relations careers. (Course is equivalent to ADV 315 & PR 324.)

SUST 101. Sustainable Earth. 3 Hours.

Introduction to Earth system processes, human impacts on the environment, and sustainability. Both human and environmental sustainability are emphasized in topics related to Earth materials, climate change, the origin of landforms, natural hazards (earthquakes, volcanoes, landslides, and floods), sustainable energy, and water resources.

SUST 101L. Sustainable Earth Laboratory. 1 Hour.

PR or CONC: SUST 101. Laboratory study of climate change, sustainability of natural resources, and geologic hazards through examination of data sets, case studies and critical analyses of coupled human-environment interactions.

SUST 102. Global Sustainability. 3 Hours.

Focuses on how individuals, communities and institutions located in regions across the world are responding to the challenges of social, economic and environmental change. Students study distinctive patterns of change in rural and urban areas as well as the response from institutions across scales from local to international levels. Students explore how individuals and organizations develop solutions to sustainability.

THET 102. Acting. 3 Hours.

(Open to all students.) Basic theories and concepts in stage acting for the beginning student. Emphasis on the physical, intellectual, emotional, and personality languages of acting.

THET 120. History of Musical Theatre. 3 Hours.

This course explores American musical theatre, one of this country's primary contributions to world culture, covering its origins, components, and its major creative figures.

THET 200. Production Practicum. 1 Hour.

PR: THET 104 or THET 106 or consent. (May be repeated for a maximum of 4 hours.) Assigned theatre projects as an introduction to the elements of theatrical production.

TSCT 110. Formwork. 1 Hour.

This hands-on course provides a basic working knowledge of concrete formwork. Topics included are installation of job-built and manufactured forms, bridge forms, hardware, concrete stairs, layout, and setting of walls and decks.

TSCT 111. Safety in Construction Trade. 2 Hours.

This course provides entry level construction workers with a general awareness on how to recognize and prevent hazards on a construction site. The training covers a variety of construction safety and health hazards that workers may encounter at a construction site. Students earn both OSHA10-hour Construction Industry and basic First Aid/CPR certifications.

TSCT 112. Framing and Installation. 2 Hours.

This class teaches how to frame all aspects of a building, including stairs, floors, doors, walls, roofs and ceilings. Students learn about construction materials, geometry and power tools.

TSCT 113. Aerial Lifts and Rigging. 1 Hour.

This course provides safe work practices for powered industrial trucks with aerial and scissor lifts. Training covers the fundamentals to perform rigging or signaling work in conjunction with the hoisting or lowering of materials on the outside of a building with hoisting equipment.

TSCT 114. Drawings & Blueprint Reading. 1 Hour.

This course will build upon the students' basic mathematical skills and knowledge to accurately read and interpret blueprints. This ability will lead to accurate calculations and measurements leading to the success of the construction project.

TSCT 115. Scaffolding Qualification. 2 Hours.

This course provides an overview of the uses and work roles in scaffold erection as well as an overview of the different types and requirements of scaffold systems.

TSCT 116. Introduction to Welding. 2 Hours.

A fundamental course in layout and fabrication related to the welding industry. Major emphasis on structural shapes as used in construction.

TSCT 117. Flooring 1. 1 Hour.

Students will be introduced to the several different types of materials available for laying a new floor or replacing an old floor. Students will learn how to install vinyl composition (VCT) and ceramic tile using proper planning, layout, and appropriate use of hand and power tools. Students will also learn techniques needed to install cove base.

TSCT 118. Advanced Framing. 1 Hour.

PR: TSCT 112 with a minimum grade of C-. This course will stress job planning as well as building of shaft and separation walls.

TSCT 119. Heavy Highway. 2 Hours.

Heavy and highway carpenters are experts who put a high value on effective training and customer service. This class stresses teamwork, communications, technical proficiency, and safety.

TSCT 120. Construction Internship. 1-18 Hours.

This course consists of paid on the job training, internship, or practicum performed in a business, industry, trade, or technical career setting within the student's occupational area. The on-the-job-training component is converted to credit hours at a ratio of 160:1. Contact hours experienced through on-the-job training will be verified by an employer or apprenticeship official.

TSCT 191. First-Year Seminar. 1-3 Hours.

Engages students in active learning strategies that enable effective transition to college life at WVU. Students will explore school, college and university programs, policies and services relevant to academic success. Provides active learning activities that enable effective transition to the academic environment. Students examine school, college and university programs, policies and services.

TSCT 210. Interior Stair Framing. 1 Hour.

This course will identify the various types of stairs; define basic stair parts and terms; calculate the rise-run ratio, number and size of risers, and stairwell length; prepare sketches of the types of stringers; stringer layout for a given stair rise and run; and list prefabricated stair parts that are commonly available.

TSCT 211. Advanced Drawings & Blueprints. 1 Hour.

PR: TSCT 114 with a minimum grade of C-. The emphasis of this course is on visualizing complex three-dimensional parts from two dimensional drawings and reading additional supplemental information from different kinds of drawings.

TSCT 212. Ceilings. 2 Hours.

This hands-on course introduces students to codes and industry standards related to exposed-grid ceiling installations. Topics covered are materials identification, job planning, print reading, laser technology, layout, and installation of exposed-grid ceilings.

TSCT 213. Pile Driving. 2 Hours.

Students learn to drive steel, concrete, or wood piling into the earth during the early stages of construction. This skill is crucial to both a project's success and the safety of workers since the piling is necessary to hold back the earth during excavations; to set up the foundation of skyscrapers, highways, and bridges; and to build docks and wharfs.

TSCT 214. Optics. 2 Hours.

This class is an overview of leveling and optical tools used in construction. This course covers setup and operation of a theodolite and its application to field layout.

TSCT 215. Doors and Hardware. 1 Hour.

This hands-on course covers all aspects of door and frame preparation and installation. In addition, industry standards and codes for hardware installation will be covered.

TSCT 216. Flooring 2. 2 Hours.

PR: TSCT 117 with a minimum grade of C-. Simple and complex installation of vinyl composition tile (VCT), sheet vinyl, and linoleum. Students will also learn proper planning, layout, and techniques for these types of flooring materials and all hand and power tools required.

TSCT 217. Rigging Qualification. 2 Hours.

This course covers construction rigging hardware, procedures, and load calculations in compliance with OSHA and state regulations. Qualification cards will be issued upon successful completion of written exams and hands-on live crane signaling operation.

TSCT 218. Healthcare Construction. 1 Hour.

Course covers best practices in Healthcare Construction and how to contain pathogens, control airflow, protect patients, and work without disrupting adjacent operations. Students learn how to classify work areas to minimize risks and how to understand and adhere to ICRA protocols.

TSCT 219. Fire Stopping. 1 Hour.

This class teaches the correct techniques for the installation of fire stop materials as required by building codes.

TSCT 220. Fall Protection. 1 Hour.

This course addresses safety requirements when working from an elevated area such as stairs, ladders, scaffolds, aerial lifts, and steel erection. It also addresses how to use, inspect, and maintain personal protective equipment.

TSCT 293. Special Topics. 1-6 Hours.

PR: Consent. Investigation of topics not covered in regularly scheduled courses.

ULIB 101. Introduction to Library Research. 2 Hours.

Focuses on the concepts and logic of information access including using the libraries' online catalog, various databases and the Internet to find quality information. Incorporates hands-on practice with electronic resources for research and synthesis of information.

ULIB 102. Introduction to Health Sciences Library Research. 2 Hours.

Focuses on the concepts and logic of information access including using the libraries' online catalog, various databases and the Internet to find quality health sciences information. Incorporates hands-on practice with electronic resources for research and synthesis of information. Students produce information products for a variety of audiences.

WGST 150. Women in Movies. 3 Hours.

Through viewing popular Hollywood films, we will analyze femininity across the life span. Critical thinking and cultural analysis will be practiced as we study heroines, working girls, motherhood, brides, cheerleaders, and old women on screen.

WGST 170. Introduction to Women's and Gender Studies. 3 Hours.

The major contexts in which gender identities have been and are defined and of the relationships between these definitions and the roles and history of women and men in society and culture.

WGST 225. Women in Appalachia. 3 Hours.

Use variety of sources to explore how race, class, ethnicity, sex and gender impact lives of diverse Appalachian women, including portrayal of women, stereotypes, impact of stereotypes, and how women construct their own identities.

WGST 250. Women in Science. 3 Hours.

History of women in science and methods of gender analysis applied to issues facing women in science in the United States.

WGST 340. Gender and Violence. 3 Hours.

Gender violence has implications for all members of society. This course will examine violence in the lives of women across the lifespan. Etiology, theories, effects, and prevention modalities will be evaluated.

WMAN 100. The Tradition of Hunting. 3 Hours.

Introduction to the cultural and spiritual role of hunting; use of hunting as a wildlife management tool; and its economic value in wildlife conservation programs. Includes discussions on gun control, anti-hunting, and animal rights.

WMAN 150. Principles of Conservation Ecology. 3 Hours.

Overview of the science of conservation ecology with emphasis on the concepts of biological diversity, extension, habitat loss and fragmentation, establishment of protected areas, endangered species, and establishment and preservation of new populations.

WMAN 450. Advanced Wildlife and Fisheries Management. 4 Hours.

PR: WMAN 300 and Coreq: WMAN 450L. Principles and practices of wildlife and fisheries habitat and species management.

WMAN 450L. Advanced Wildlife and Fisheries Management Laboratory. 0 Hours.

PR: Corequisite of WMAN 450. Advanced Wildlife and Fisheries Management - WMAN 450 Laboratory.

WRIT 304. Business and Professional Writing. 3 Hours.

PR: (ENGL 101 and ENGL 102) or ENGL 103. Students will analyze different writing contexts, meet the needs of different audiences, and organize and present material in letters, memos, and reports. Includes some research, Internet components, and a review of style, grammar and usage.

WRIT 305. Technical Writing. 3 Hours.

PR: (ENGL 101 and ENGL 102) or ENGL 103. Writing in scientific and technical fields. Introduces students to typical genres, workplace practices, document design, and conventions of writing for experts and non-experts.

WVUE 191. First Year Seminar. 1-3 Hours.

Exploration of academic experiences through meaningful contexts. The course will envelope a range of academic components needed to achieve student success and successfully transition to West Virginia University.

WVUE 270. Effective Public Speaking. 3 Hours.

Designed for improvement of the student's speech based upon theory and demonstrated performance of voice and diction skills and public-speaking skills for effective communication in a variety of speaking situations.