
57 5AGDE7E A887D76

Courses administered through CE are University catalog courses with the same departmental designations, course descriptions, numbers, titles, and credits.

Courses will transfer across Higher Education. For out of state schools please check with the college. For more information, please see the Arkansas Course Transfer System: <http://acts.adhe.edu/studenttransfer.aspx>

Link to University Course Catalogue: <http://ualr.edu/catalogs/undergraduate-catalog/>

List of courses offered through UALR's Concurrent Enrollment course with descriptions:

ART

ARST 1310 Basic Drawing

A beginning course in drawing with attention to the formal elements (Elements of Art and Principles of Design). Emphasis is placed on drawing realistically using line and/or value. Topics to be covered are; the use of line, creation of volume through the use of value, expressive markmaking, composition, and perspective. Three credit hours.

ARST 1315 Two-Dimensional Design

Introduction to concepts of design in visual art. Emphasis on two-dimensional forms. Recommended for non-art majors who want to take some studio art courses. Three credit hours.

ARST 2315 Three-Dimensional Design

Prerequisite: ARST 1315. Concepts of three dimensional design. Emphasis on both form and content. Three credit hours.

BIOLOGY

BIOL 1400 Evolution and Environmental Biology

Evolutionary, ecological, and environmental interrelationships among organisms. Basic biological principles and modern technology form the basis for inquiry and debate. The impact of society upon global biodiversity is examined from competing viewpoints. The role of science in shaping society and the influence of society upon science are evaluated. Students learn through reading, writing, computer simulations, videos, field exercises, and through participation in critical thinking and problem solving activities. Three hours lecture, two hours laboratory per week. Four credit hours. (ACTS Course Number BIOL 1004)

57 5AGDE7E A887D76 CONTINUED

BIOL 1401 Science of Biology

The process of science, including observation, evaluation, and predictions, will be applied to the understanding of biological principles. Illustration of the methods of science in the study of major biological concepts, including the cell theory, energy transformation, inheritance, and the theory of evolution. Selected biological systems will be surveyed to compare life forms and to examine related human issues. Three hours lecture, two hours laboratory per week. Four credit hours. (ACTS Course Number BIOL 1014)

BIOL 1411 Introduction to Human Anatomy and Physiology I

The first semester of a two-semester course emphasizing the anatomy and physiology of the human organism. After an introduction, the following topics will be discussed: basic chemistry, cell biology, histology, integumentary system, skeletal system, nervous system, and sensory system. This course cannot be used for credit toward a biology major or minor. Three hours lecture, two hours laboratory per week. Four credit hours. (ACTS Course Number BIOL 2404)

BIOL 1412 Introduction to Human Anatomy and Physiology II

Prerequisite: Biology 1411 or consent of instructor. The second semester of a two-semester course emphasizing the anatomy and physiology of the human organism. The muscular, digestive, respiratory, circulatory, lymphatic, urinary, reproductive, and endocrine organ systems will be covered during this term. This course cannot be used for credit toward a biology major or minor. Three hours lecture, two hours laboratory. Four credit hours. (ACTS Course Number BIOL 2414)

BIOL 2401 Microbiology

Prerequisites: BIOL 1400 or 1401, or 1411 and 1412, AND CHEM 1400 or 1402, or their equivalents. The morphology, physiology, and classification of microorganisms the relationship of microorganisms to biotechnology, medicine, and nursing. Two hours lecture, four hours laboratory per week. Four credit hours (ACTS Course Number BIOL 2004)

57 5AGDE7E A887D76 CONTINUED

BIOL 2402 Botany

Prerequisite: BIOL 1400 or 1401 or equivalent. The structure and function of plants at the molecular, cellular, and organismal levels; survey of major plant groups. Two hours lecture, four hours laboratory per week. Four credit hours. (ACTS Course Number BIOL 1034)

BIOL 2403 Zoology

Prerequisite: BIOL 1400 or 1401 or equivalent. A survey of the animal kingdom from microscopic forms to mammals. Acquaints the student with the nature of animals. A study of general principles including taxonomy, organ systems, similarities of structure, function, and behavior of animals. Three hours lecture, two hours laboratory per week. Four credit hours. (ACTS Course Number BIOL 1054)

Engineering and Computer Sciences

CPSC 1370 Computer Literacy

The fundamental concepts of computing in a personal computer environment. Introduction to hardware and software and system configurations. The focus is on practical problem solving using popular PC application software for word processing, spreadsheets, and databases. This course may not be counted for credit toward a computer science major or minor. Three hours lecture per week. Three credit hours. (ACTS Course Number CPSI 1003)

CPSC 1375 Programming I

Prerequisite: MATH 1302 or equivalent. Co requisite: CPSC 1175. Introduction to algorithm development and implementation using control structures, functions, arrays, pointers, and basic object-oriented concepts. Successful completion of this course requires a grade of C or greater. Three hours lecture per week. Three credit hours.

CPSC 2376 Programming II

Prerequisite: CPSC 1375. Advanced programming concepts including structures, abstract data types, details of object oriented concepts including encapsulation and polymorphism in current object-oriented language. Successful completion of this course requires a grade of C or greater. Three hours lecture per week. Three credit hours.

57 5AGDE7E A887D76 CONTINUED

CPSC 2380 Data Structures and Algorithms

Prerequisite: CPSC 2376 or CPSC 2377. A systematic study of the main data structures of computer science: arrays, stacks, queues, linked lists, trees, graphs, hash tables. Implementation and analysis of the algorithms and programming techniques for searching, sorting, inserting into, and deleting from these structures; efficiency considerations. Successful completion of this course requires a grade of C or greater. Three hours lecture per week. Three credit hours.

SYEN 1210 Intro to Systems Engineering

Prerequisite: MATH 1302 or 1315, or consent of instructor. Introduction to engineering as a profession, engineering problem solving, engineering design process, engineering ethics, engineering communication, history of engineering developments, and case studies involving leading inventions in the engineering field from a variety of disciplines. Students work in teams to build small engineering projects. Course includes industry visits and talks by industry specialists. One hour lecture. Two hours lab. Two credit hours.

IFSC 1310 Internet Technologies

Prerequisite: Familiarity with using a desktop computer. This course is an introduction to Internet client-side technologies and standards-based web development. The course will be divided into sections covering the core components of any web site/page. Core components include Structure, Content, Design (presentation), and Behavior. Three lecture hours per week. Three credit hours.

Chemistry and Earth Sciences

CHEM 1400 Fundamentals of Chemistry I

Prerequisite: MATH 1302 with a grade of C or greater. The first in a two-course sequence designed to introduce students in the health related professions (nursing, dental hygiene, physical therapy, respiratory therapy...) to nomenclature, stoichiometry, measurement, periodicity, molecular structure, states of matter, energy, nuclear chemistry and redox and acid/base equilibria. Completing the two---course sequence qualifies students to enroll in CHEM 2450 but no other chemistry classes. This class meets ACTS criteria. Three hour long lectures and one three---hour long laboratory session per week. Four credit hours. (ACTS Course Number CHEM 1214)

57 5A GDE 7E A 887D 76 CONTINUED

CHEM 1401 Fundamentals of Chemistry II

Prerequisite: CHEM 1400 with a grade of C or greater. The class continues to build upon the knowledge foundation in chemistry and introduces organic nomenclature, functional group reactions, properties of carbohydrates, lipids, proteins, nucleic acids, and enzymes and principles of metabolism. Completing the course qualifies students to enroll in CHEM 2450 but no other chemistry classes. This class meets ACTS criteria. Three hour long lectures and one three-hour laboratory session per week. Four credit hours. (ACTS Course Number CHEM 1224)

ERSC 1302 Physical Geology

An introduction to the science of geology, the geological view of the human environment, how geologists learn about Planet Earth, and how society and geology interact. Active learning applied to natural processes shaping the earth's surface, producing the solid and fluid earth, and historical development of geological paradigms. Three hours lecture per week. Three credit hours. (ACTS Course Number GEOL 1114 when taken with ERSC 1102)

Foreign Languages

CHIN 1311 Elementary Mandarin I

A course for beginners with no knowledge of Mandarin Chinese. Instruction in correct pronunciation, aural comprehension, and simple speaking ability leading to active mastery of basic grammar and a limited reading ability. Chinese culture is also introduced. Three credit hours.

CHIN 1312 Elementary Mandarin II

Prerequisite: CHIN 1311 or equivalent. Continuation of CHIN 1311. Three credit hours.

FREN 1311 Elementary French I

A course for beginners with no knowledge of French. Instruction in correct pronunciation, aural comprehension, and simple speaking ability leading to active mastery of basic grammar and a limited reading ability. Three credit hours. (ACTS Course Number FREN 1013)

57 5AGDE7E A887D76 CONTINUED

FREN 1312 Elementary French II

Prerequisite: FREN 1311 or equivalent. Continuation of FREN 1311. Three credit hours. (ACTS Course Number FREN 1023)

FREN 2311 Intermediate French

Prerequisite: FREN 1312 or equivalent. The intermediate course leads to greater facility in the spoken language and to more advanced reading skills. Three credit hours. (ACTS Course Number FREN 2013)

SPAN 1311 Elementary Spanish I

A course for students with no knowledge of Spanish. Instruction in correct pronunciation, aural comprehension, and simple speaking ability. Three credit hours. (ACTS Course Number SPAN 1013)

SPAN 1312 Elementary Spanish II

Prerequisite: SPAN 1311 or equivalent. Practice in correct pronunciation, aural comprehension, and simple speaking ability leading to mastery of basic grammar and limited reading ability. Three credit hours. (ACTS Course Number SPAN 1023)

SPAN 2312 Intermediate Spanish

Prerequisite: SPAN 1312 or equivalent. The intermediate course leads to a greater facility in the spoken language and to more advanced reading skills. Three credit hours. (ACTS Course Number SPAN 2013)

Health

HHPS 1370 Personal Health

Designed to develop the understanding, attitudes, and practices that contribute to optimum physical, mental, and social wellbeing. Emphasis on major health problems and causes of death in various age groups. Three hours lecture per week. Three credit hours. (ACTS Course Number HEAL 1003).

57 5AGDE7E A887D76 CONTINUED

History and Government

HIST 1311 History of Civilization I

Recommended prerequisite: RHET 1311. The history of the world's significant civilizations from their beginnings to approximately AD 1600: the development of integrated political, social, economic, religious, intellectual, and artistic traditions and institutions within each of those culture's significant intercultural exchanges. Three credit hours. (ACTS Course Number HIST 1113)

HIST 1312 History of Civilization II

Recommended prerequisite: RHET 1311. The history of the world's significant civilizations since approximately AD 1600: examination of the persistence of traditional civilizations and the changes in the world order due to the development of modern industrial society, modern science, and the nation state. Three credit hours. (ACTS Course Number HIST 1123)

HIST 2311 US History to 1877

Description, analysis, and explanation of the major political, social, economic and diplomatic events through "Reconstruction." Special attention is devoted to the cross-cultural development of three civilizations, Native American, European, and African, within the geographical context of the North American continent. Major topics for study include European colonial empires; the American Revolution; the Constitution of 1787; evolution of a national government, federal in system and republican in form; social and economic theories and practices; relationship with foreign governments; and the American Civil War. Three credit hours.

HIST 2312 US History since 1877

Description, analysis, and explanation of the political, social, economic and diplomatic events to the present time. Special attention is devoted to the forces of Modernity and the impact of cultural pluralism on traditional institutions. Major topics for study include industrialization; agrarianism; labor; immigration; reform movements; total and limited war; economic theory and practice; and the U.S.'s role in world affairs. Three credit hours. (ACTS Course Number HIST 2123)

57 5AGDE7E A887D76 CONTINUED

POLS 1310 American National Government

An introduction to the political institutions, processes, and patterns of the national government of the United States, focusing on the Congress, presidency, and courts, and on their interrelationships. Attention is given to suffrage and elections, political parties, interest groups, and public opinion. Significant issues and problems of national policy such as civil rights and civil liberties are considered. Three credit hours. (ACTS Course Number PLSC 2003)

Mathematics

MATH 1302 College Algebra

Prerequisite: A grade of C or greater in Math 0301-Intermediate Algebra, a grade of AA, BA or CA in Math 0321 Pre-Core Mathematics, an equivalent transfer course, or an ACT Mathematics score of 21, or SAT Mathematics score greater than or equal to 500. Study of functions, including but not limited to, absolute value, quadratic, polynomial, rational, logarithmic, and exponential; systems of equations; and matrices. Three hours lecture. Three credit hours. (ACTS Course Number MATH 1103)

MATH 1303 Trigonometry

Prerequisite: a grade of C or greater in MATH 1302, an equivalent transfer course, or a suitable score on a mathematics placement test *Corequisite with consent of instructor:* MATH 1302. Circular functions and their graphs, identities, angles and their measure, functions of angles, right triangles, Law of Sines, Law of Cosines, inverses of circular functions, solutions of trigonometric equations, complex numbers, and DeMoivre's Theorem. Three hours lecture. Three credit hours. (ACTS Course Number MATH 1203)

MATH 1451 Calculus I

Prerequisites: grades of C or greater in MATH 1302 and 1303, or MATH 1401 equivalent transfer courses, or a suitable score on a mathematics placement test. Limits and limit theorems, continuity, derivatives and the chain rule, implicit differentiation, applications, the definite integral, the Fundamental Theorems of Calculus, and applications of integration. Three hours lecture. Two hours lab. Four credit hours. (ACTS Course Number MATH 2405)

57 5AGDE7E A887D76 CONTINUED

MATH 1452 Calculus II

Prerequisite: a grade of C or greater in MATH 1451 or an equivalent transfer course. Integration, the definite and indefinite integrals, L'Hopital's rule, improper integrals, Taylor polynomials, infinite series, power series, polar coordinates, and conic sections. Three lecture hours and two lab hours. Four credit hours. (ACTS Course Number MATH 2505)

MATH 1321 Quantitative and Mathematical Reasoning

Prerequisite: A grade of C or greater in Intermediate Algebra or an equivalent transfer course, or a grade of AQ, BQ, CQ, in any of UALR's Pre-Core Mathematics courses (MATH 0321, MATH 0322, MATH 0323, MATH 0324), or a MATH ACT score of 21 or greater, or an SAT Mathematics score of 500 or greater. The overarching goal of Quantitative and Mathematical Reasoning is to provide students with mathematical understandings and skills to be productive workers, discerning consumers, and informed citizens. Students will solve problems using mathematical reasoning involving logic, proportions, algebra, and relations. In keeping with the tenets of student performance in a general education course, this course is designed to deliver instruction that focuses on process, conceptual understanding, communication and problem solving found in the following strands: (a) Personal, state and national finance (b) Statistics and probability I Mathematical modeling (d) Quantities and measurement. Students seeking a degree in a Non-STEM major are advised to take this course. Note: This course satisfies the state mandated requirement for the baccalaureate degree. Three hours lecture. Three credit hours. (ACTS Course Number MATH 1003)

MATH 2453 Calculus III

Prerequisite: a grade of C or greater in MATH 1452 or equivalent transfer course. Three-dimensional analytic geometry, vectors, lines, planes, partial derivatives, multiple integrals, line integrals, and gradient fields. Three lecture hours and two lab hours. Four credit hours. (ACTS Course Number MATH 2603)

STAT 2350 Introduction to Statistical Methods

Prerequisite: MATH 1302 or 1315 or 1321 or equivalent. Introduction to the fundamental ideas of statistics, including descriptive statistics, normal distributions, sampling experiments, tests of hypotheses, and elementary probability. This course cannot be applied as upper-level credit toward a major in mathematics. Three hours lecture. Three credit hours.

57 5A GDE7E A887D76 CONTINUED

Management

MGMT 1300 Introduction to Business

A survey of business organization and operation, the various fields of business, basic business problems and procedures, the vocabulary of business, and the opportunities open to college graduates in business. Not open to junior and senior majors within the college. Three credit hours. (ACTS Course Number BUS 1013)

Philosophy

PHIL 2320 Ethics and Society

Prerequisite: RHET 1311. Study of selected texts reflecting a variety of ethical systems from Western and non-Western literary heritages and ethical traditions. Assigned works represent several national ethical literatures, with at least one major ethical text from each of four periods (antiquity, medieval, early modern, and contemporary). Three credit hours.

Physics and Astronomy

PHYS 1321 College Physics I

Prerequisite: Grade of C or better in MATH 1302 or MATH 1401. Introduction to the fundamental principles underlying the foundations of classical and modern physics, including kinematics, Newtonian mechanics, fluids, thermodynamics, simple harmonic motion, and wave motion. An algebra-based course designed for majors in the life sciences, pre-professional students, and engineering technology students, but is open to any student who meets the prerequisites. Three hours lecture, one hour optional discussion. Three credit hours. (ACTS Course Number PHYS 2014)

PHYS 1121 College Physics I Lab

Prerequisite concurrent: PHYS 1321. Two hours laboratory covering topics in PHYS 1321. Students explore concepts and principles using laboratory skills of inquiry, measuring techniques, mathematical analysis, graphing, and modeling. One credit hour. (ACTS Course Number PHYS 2014)

57 5AGDE7E A887D76 CONTINUED

PHYS 1322 College Physics II

Prerequisite: PHYS 1321 with a grade of C or better. Continuation of PHYS 1321, including topics of electricity, magnetism, electromagnetism, electromagnetic radiation, geometric and physical optics, and selected topics from modern physics, including radioactivity.

Three hours lecture, one hour optional discussion. Three credit hours. (ACTS Course Number PHYS 2024)

PHYS 1122 College Physics II Lab

Prerequisite concurrent: PHYS 1322. Two hours laboratory covering topics in PHYS 1322.

Students explore concepts and principles using laboratory skills of inquiry, measuring techniques, mathematical analysis, graphing, and modeling. One credit hour. (ACTS Course Number PHYS 2024)

ASTR 1301 Introduction to Astronomy

Study of the process of science by which knowledge about our place in the cosmos is obtained. Examples of possible observations and the inferences drawn from them. Emphasis on how we obtain our knowledge and the certainty of various parts of it. A core curriculum course. Three credit hours. (ACTS Course Number PHYS 1204)

Psychology

PSYC 2300 Psychology and Human Experience

Focuses on development of the individual in the context of physical and social environments. Topics include the scientific method and its application to the study of the individual, the relationship between brain and behavior, social and personality development, theories of motivation, maladaptive behavior, social cognition and interaction, and the effects of membership in different groups. Students learn through writing, reading, discussing, listening, and participating in critical thinking and problem-solving activities.

Three credit hours. (ACTS Course Number PSYC 1103)

57 5AGDE7E A887D76 CONTINUED

Rhetoric/AP Language

RHET 1311 Composition I

Prerequisite: A minimum ACT English score of 19, a minimum SAT I verbal score of 450, RHET 0310, or RHET 0321. Practice in writing, with an emphasis on personal, expressive writing, as well as transactional writing. Students will focus on organizing and revising ideas and writing well organized, thoroughly developed papers that achieve the writer's purpose, meet the readers' needs, and develop the writer's voice. Final course grades are A, B, C, or NC. Students must complete this course with a grade of C or greater to take RHET 1312. Three credit hours. (ACTS Course Number ENGL 1013)

RHET 1312 Composition II

Prerequisite: RHET 1311 with a C or greater or equivalent. Those students required by state law to enroll in RHET 0321 must successfully complete that course before enrolling in RHET 1312. Practice in writing, with an emphasis on academic forms. Students will focus on analysis, argumentation, research, and documentation writing. Final course grades are A, B, C, or NC. Three credit hours. (ACTS Course Number ENGL 1023)

English/AP Literature

ENGL 2337 World Literature

Prerequisite: completion of the first year writing requirement. Study of selected texts reflecting various Western and non-Western literary heritages and traditions. Assigned works represent several national literatures, with at least one major text from each of four periods (antiquity, medieval, early modern, and the modern period) and from a minimum of three literary genres. Three credit hours. (ACTS Course Number ENGL 2113)

ENGL 2338 World Literature Themes

Prerequisite: completion of the first year writing requirement. This class addresses the same competencies as ENGL 2337, but through exploration of a specific topic. Either 2337 or 2338 satisfies the core requirement, but they are distinctive courses and both may be taken for credit. Three credit hours.

ENGL 2335 Intro to Literature

For the beginning student of literature. Topics vary and include selections from poetry, fiction, and drama. Three credit hours.