Dual Credit Course Listing

Here is a comprehensive list of John A. Logan College's Dual Credit Courses currently available to students at our various in-district high schools. Please contact your school's guidance department or our Dual Credit office to see what courses are available at your school.

Allied Health & Public Service - Early Childhood
Allied Health & Public Service - Nursing
Applied Technology - Automotive & Welding
Applied Technology - Drafting
Business
English
Humanities
Life Science - Biology
Life Science - Physical Education
Mathematics
Physical Science
Social Science

ECE 155 The Early Childhood Profession

3 Hours

Prerequisites: None 3 hours weekly (3-0)

This course will introduce students to the broad field of early childhood education to include an overview of diverse early childhood programs and settings; career opportunities and professional personnel; history and philosophy; legislation impacting child care; and major child and family issues. Emphasis will be placed on value clarification, making the right career choice, and personal and professional development as preparation for working with children, parents, and staff. Understanding of developmentally appropriate practices and quality programming will be fostered through classroom and field experiences.

ECE 160 Development and Care of Children

IAI – ECE 912 4 Hours

Prerequisites: None 6 hours weekly (3-3)

This course is designed to acquaint students with theories and principles of development from preschool-middle childhood. At the end of the semester, the student should have developed an understanding of the physical, social, emotional, cognitive, and language development of children and ways in which adults can support and enhance their development. Theories discussed include Piaget, Erikson, Vygotsky, Watson, and others. Students are introduced to DCFS guidelines and NAEYC's developmentally appropriate practices. Students enrolled in ECE 160 receive practical experience, three hours per week, in Logan's Preschool.

NAD 101 Nursing Assistant Training

7 Hours

Prerequisites: None 10.5 hours weekly (5.5-5)

This course is designed to train students to be competent in skills necessary for the nursing assistant to function successfully in a hospital, long-term care facility, or other health care facilities. The nursing assistant will provide services related to the comfort and welfare of the resident under direct supervision of the licensed nurse or physician. Some topics to be covered include body mechanics, transfer techniques, basic anatomy and physiology, personal care, vital signs, rehabilitation, death, Alzheimer patient care, dying, and post-mortem care. Cardiopulmonary resuscitation is also included.

AST 173 Braking Systems

4 Hours

Prerequisites: None

8 hours weekly (2-6) (Meets 4 hours daily for 30 days or 16 hours weekly for 7.5 weeks)

Provides instruction in hydraulic principles, brake lines and hoses, disc and drum brake components, and anti-lock braking systems.

AST 281 Suspension and Steering

4 Hours

Prerequisites: None

8 hours weekly (2-6) (Meets 4 hours daily for 30 days or 16 hours weekly for 7.5 weeks)

A study of suspension and steering system diagnosis, repair, and adjustment.

WEL 150 Oxy-Acetylene Fusion Welding I

1 Hour

Prerequisites: None 2 hours weekly (0-2)

A study of oxy-acetylene equipment; production of gases, storage and distribution, types of flames, operator protective equipment, and general safety precautions. Joints welded will be the butt-joint and outside corner joint in the flat position.

WEL 154 Arc Welding I

2 Hours

Prerequisites: None 4 hours weekly (0-4)

A study of process and safe work habits, striking an arc, running beads of weld in several directions, and padding, all in the flat position. Also, a study of American Welding Society (AWS) weld symbols, including the fillet weld symbol. Weaves, flat position, and three different patterns are taught.

DRT 181 Technical Drafting I

4 Hours

Prerequisites: None 6 hours weekly (2-4)

This is a lecture-laboratory course designed to promote the basic technical skills involved in mechanical drafting. Geometric construction, orthographic projection, sections, auxiliary views, dimensioning, and tolerancing will be studied with the major emphasis on the fundamentals of orthographic projection.

DRT 185 Computer Graphics I

2 Hours

Prerequisites: None 3 hours weekly (1-2)

This course is designed to provide the student with an introduction to the practical uses of computer graphics. The student will become familiar with using a CAD system. The lab will provide hands-on experience.

ACC 100 Business Accounting

3 Hours

Prerequisites: None 3 hours weekly (3-0)

This is a practical accounting course for non-accounting majors. It includes a study of the elements of accounting, accounting procedures, conceptual framework, business transactions, common journals, posting, trial balance, worksheet, adjusting entries, income statement, balance sheet, statement of owner's equity, closing entries, post-closing trial balance, accounting for cash, accounting for purchases and sales, and payroll accounting

ACC 200 Financial Accounting I

IAI – BUS 903 3 Hours

Prerequisites: None 3 hours weekly (3-0)

Financial Accounting is designed to be a complete learning package for the first accounting course at the college level. Financial Accounting presents accounting as an information system that produces summary financial statements, primarily for users external to a business or other enterprise. Students study the forms of business organizations and the common transactions entered into by businesses. The emphasis is on understanding and applying basic accounting principles and other concepts that guide the reporting of the effect of transactions and other economic events on the financial condition and operating results of a business. How to analyze and interpret historical financial statements and the limitation of using these in making forward-looking business decisions are included. The course will expose the students to such topics as ethics, alternative forms of business organizations, typical business practices, legal instruments and financial statements. Woven throughout all of this is the step-by-step instruction

needed to understand and apply the concepts, principles, and practices of the modern accounting system according to generally accepted accounting principles.

BUS 116 Keyboarding I

3 Hours

Prerequisites: None 5 hours weekly (1-4)

Mastery of the keyboard with speed and accuracy in the touch operation of the keyboard is the major goal of this course. Skill is developed for vocational and personal uses. Business office standards are used in keyboarding basic letter styles, reports, and tables. The following grade scale is used for speed on 3-minute timings on straight copy; A=40 wpm; B=36-39 wpm; C=32-35 wpm.

BUS 215 Medical Terminology

3 Hours

Prerequisites: None 3 hours weekly (3-0)

This is an introduction to medical terminology which includes word building principles; basic anatomy and physiology; key anatomical and physiological terms; combining forms, suffixes, and prefixes. In addition, students will learn how to listen critically for important terms, respond to others using medical terminology, and generate their own terminology-rich writing and speech.

CIS 101 Introduction to Computers

3 Hours

Prerequisites: None 4 hours weekly (2-2)

This course provides an overview of the computing field and its typical applications. Key terminology and components of computer hardware, application software, and system software (including operating systems) are covered along with the development and management of information systems. Other topics include computer career opportunities, various networks (including the Internet), and World Wide Web technologies. This course also provides students with training in various industry software along with Web browser software.

ENG 101 English Composition I

IAI - C1 900

(Transfer students should take either 101 or 113.) 3 Hours

Prerequisites: Asset score of 38 or COMPASS score of 45 or ENG 052 (grade of "C" or higher) 3 hours weekly (3-0)

The primary objective of English 101 is to write effective expository prose. ENG 101 emphasizes the use of standard English and appropriate sentence structures in unified, developed, and coherent paragraphs

and essays. Writing assignments require various rhetorical modes as students learn the process of writing. The course also includes an introduction to research skills and research writing.

ENG 102 English Composition II

IAI – C1 901R 3 Hours

Prerequisites: ENG 101 or ENG 113 (either with a grade of "C" or higher) 3 hours weekly (3-0)

In this course students further develop skills in writing expository prose. English 102 is a research writing course. Assignments include documented, multi-source writing in one or two papers for a combined total of at least 2,500 words in the final, graded version(s).

ENG 113 Professional Technical Writing

IAI – C1 900R (Transfer students should take either 101 or 113.) 3 Hours

Prerequisites: None 3 hours weekly (3-0)

Technical writing is a composition course especially for engineering, science, social science, and vocational-technical students. Encompassing many different approaches to solving specific communication problems and emphasizing critical thinking skills, this course covers the written communication required in a job situation in the technical fields.

FRE 102 Elementary French II

4 Hours

Prerequisites: FRE 101 or consent of instructor

4 hours weekly (4-0)

Continuation of FRE 101 with oral practice of basic conversation and reading of French literature. Language laboratory is required.

FRE 201 Intermediate French I

4 Hours

Prerequisites: FRE 102 or consent of instructor

4 hours weekly (4-0)

Review and application of essential principles of French grammar structure and training in idiomatic usage through oral and written exercises; intensive practice of spoken language; reading of French literature with emphasis on French culture and civilization; required language laboratory assignments.

GER 102 Elementary German

4 Hours

Prerequisites: GER 101 or consent of instructor

4 hours weekly (4-0)

Continuation of GER 101 with oral practice of basic conversation and reading of German literature. Language laboratory is required.

GFR 201 Intermediate German

4 Hours

Prerequisites: GER 102 or consent of instructor

4 hours weekly (4-0)

Review and application of essential principles of German grammar structure and training in idiomatic usage through oral and written exercises, intensive practice of spoken language; reading of German literature with emphasis on German culture and civilization; required language laboratory assignments.

SPN 102 Elementary Spanish II

4 Hours

Prerequisites: SPN 101 or consent of instructor

4 hours weekly (4-0)

Different activities and techniques will be used to achieve the course objectives. After taking Spanish 101, the activities will be expanded on more vocabulary, dialogues, and conversations. The grammatical structures of the language will be studied on new topics such as preterit and imperfect tenses using different types of exercises.

This course is also offered as part of a study abroad program. Contact the Coordinator of International Education for more information.

SPN 201 Intermediate Spanish I

4 Hours

Prerequisites: SPN 102 or consent of instructor

4 hours weekly (4-0)

Students must have taken Spanish 102 in order to move to the Intermediate Spanish 201. The course will be devoted to finalize the basic grammatical structures of the language. Past participles, present perfect tense, past perfect tense, conditionals, uses of the subjunctive with different verbs and the like. In addition, an oral-conversation exercise will be part of the course.

This course is also offered as part of a study abroad program. Contact the Coordinator of International Education for more information.

SPN 202 Intermediate Spanish II

IAI – H1 900 4 Hours

Prerequisites: SPN 201 or consent of instructor

4 hours weekly (4-0)

The second section of the Intermediate Spanish requires that the students had taken Spanish 201. In this section, the course will consist of a summary of the main grammatical aspects of the language. There will be a general use combining the four skills (listening, speaking, reading, and writing) to achieve the goal of the course. The whole section will be taught mainly in Spanish.

This course is also offered as part of a study abroad program. Contact the Coordinator of International Education for more information.

MUS 105 Music Appreciation

IAI – F1 900 3 Hours

Prerequisites: None 3 hours weekly (3-0)

Music Appreciation is designed to familiarize the student with outstanding works of musical composition by means of recordings. This includes an emphasis on the elements of music, various musical forms and periods, and great composers and performers from antiquity through the 21st century.

This course is also offered as part of a study abroad program. Contact the International Education Coordinator for more information.

SPE 115 Speech

IAI – C2 900 3 Hours

Prerequisites: None 3 hours weekly (3-0)

Speech 115 combines communication theory with the practice of oral communication skills. This course: (1) develops awareness of the communication process; (2) provides inventional, organizational, and expressive strategies; (3) promotes understanding of an adaptation to a variety of communication contexts; and (4) emphasizes critical skills in listening, reading, thinking, and speaking. Students are expected to prepare and give at least three substantial speeches, including both informative and persuasive speech assignments. All classes require face-to-face performance of the three substantial speeches with the class and the instructor serving as an in-class audience.

BIO 101 Biological Science for Science Majors I

IAI – L1 910L, IAI – BIO 910 4 Hours

Prerequisites: None 5 hours weekly (3-2)

This course is designed for science majors. It is a lecture-lab course which includes the following: an introduction to biochemistry, molecular genetics, cell structure, function, and processes. The scientific method is presented in lab.

BIO 105 Human Biology

IAI – L1 904L 4 Hours

Prerequisites: None 5 hours weekly (3-2)

This course is an introduction to the study of the structure and function of the human body. The course includes laboratory experience and lecture concepts suited for a course into the functioning human body and its impact in the natural community. Topics include: chemical, molecular, and cellular biology, human structure and function, human heredity, evolution, and ecology, and homeostatic imbalances and disease and their impact on society.

PED 126 Beginning Weight Training

.5-2 Hours

Prerequisites: None Hours weekly (variable)

This course is designed as a continuation of the aerobic and weight training courses; however, with proper orientation it may be started as the first aerobics and weight training class.

MAT 111 Pre-Calculus

5 Hours

Prerequisites: MAT 061 and MAT 062 both with a grade of "C" or higher or assessment 5 hours weekly (5-0)

Students who successfully complete MAT 111 may use it to fulfill part of the 6 hours general education requirement in mathematics for the A. S. degree at John A. Logan College. However, MAT 111 cannot be taken as the <u>only</u> mathematics course for the A.A. degree. Tentatively, topics included in this course are functions, graphs, and transformations; polynomial and rational functions; exponential and logarithmic functions; angles, triangles, and trigonometric functions and their inverses; trigonometric identities, functions, and equations; triangles, vectors, and applications; systems of equations; matrices and determinants; conic sections; sequences, series, mathematical induction, and the binomial theorem.

MAT 113 Introduction to Contemporary

Mathematics IAI – M1 904 3 Hours

Prerequisites: MAT 061 and MAT 062 both with a grade of "C" or higher or assessment 3 hours weekly (3-0)

MAT 113 is a general education mathematics course which fulfills 3 hours of the core curriculum's mathematics requirement. Designed particularly for the non-science major, the course focuses on mathematical reasoning and solving of real-life problems, rather than on routine skills. Three or four of the following topics will be studied in depth: counting techniques and probability, game theory, geometry (additional topics beyond the prerequisite), graph theory, linear programming (including functions and graphs), sets and logic, mathematical modeling, the mathematics of finance, and statistics.

MAT 120 Elementary Statistics

IAI – M1 902 3 Hours

Prerequisites: MAT 061 and MAT 062 both with a grade of "C" or higher or assessment 3 hours weekly (3-0)

MAT 120 is a general education mathematics course which fulfills 3 hours of the core curriculum mathematics requirement. The course introduces the basic properties of descriptive and inferential statistics, basic probability theory, probability distributions, graphing, measures of location and variation, linear regression and correlation. Emphasis is placed on the application of statistics, distributions, and regression analysis.

PHS 101 Environmental Science

IAI – LP 900 3 Hours

Prerequisites: None 3 hours weekly (3-0)

A consumer-user course oriented toward the economics and wise use of man's energy and machines; various up-to-the-minute scientific topics will be discussed; scientific versus environmental trade-offs will be analyzed.

PHS 111 Environmental Science II

IAI – LP 901 3 Hours

Prerequisites: None 3 hours weekly (3-0)

This is an interdisciplinary physical and life science course that focuses on the study of humankind's relationship with other organisms and the nonliving environment, combining information from biology, chemistry, geography, geology, physics, economics, sociology, cultural anthropology, agriculture, engineering, law, politics, and ethics. Water, land, and food resources, biodiversity, hazardous wastes, and regional and global atmospheric changes are some of the topics that are covered in this course.

HIS 201 United States History I

IAI – S2 900 3 Hours Prerequisites: None 3 hours weekly (3-0)

The origins of American culture from exploration through settlement and the founding of the United States. Emphasis is given to social, religious, economic, and political factors that shaped and continue to shape American civilization. Colonization, development of American identity, rebellion against Great Britain, the writing of the Constitution, and the evolving cultures of North and South are addressed. The course culminates in the sectional crisis, the Civil War, and Reconstruction.

HIS 202 United States History II

IAI – S2 901 3 Hours

Prerequisites: None 3 hours weekly (3-0)

United States History from Reconstruction to the present. Emphasis is placed on the importance of industrialization and the rise of business in transforming both North and South, and the significance of responses of workers, farmers, religious figures, and others to the social and economic transformation of America. The Progressive Movement, New Deal, New Frontier, Great Society, and other domestic issues are presented, along with the role of the United States in the world wars and the Cold War, and the post-Cold War role of the United States as superpower.

PSY 110 College Success and Career Planning

3 Hours

Prerequisites: None 3 hours weekly (3-0)

This course is designed to provide students with guidelines, strategies, and actions toward college success and career planning. Specific strategies for success are included in setting goals, planning ahead, time management, active learning, learning styles, study skills, choosing a major, planning a career, managing a healthy lifestyle, developing personal values, and workforce preparation.

PSY 132 General Psychology

IAI – S6 900 3 Hours

Prerequisites: None 3 hours weekly (3-0)

General Psychology is an introductory course including the study of scientific research and application in regard to the psychological areas of affect, behavior, and cognition. This course is offered in the belief that an introduction to the many facets of psychology is an important part of anyone's general educational development. Therefore, a general goal of this course is to prepare students to be informed critical thinkers of contemporary psychology, as well as to provide a foundation for further study in psychology.

SOC 263 Marriage & the Family

IAI – S7 902 3 Hours

Prerequisites: None 3 hours weekly (3-0)

A sociological examination of mate selection and marriage, family life, marital adjustments, and the place of the family in American culture. Cross-cultural comparisons will consider child-rearing, communal living, the latest trends, and predictions about the future.