Approved IPFW Dual Credit Courses

Collegiate Connection offers carefully-selected courses in various subject areas for concurrent credit. A majority of the state priority dual credit (PDC) courses are available, and they are marked by PDC on the list below. What courses are offered and when they are offered is decided by the high school and is based on their curricular needs. Not all courses are offered at each participating high school. All IPFW courses offered for concurrent credit are catalogued courses and approved through the regular course approval process of the university. Courses administered through Collegiate Connection are recorded on students’ official academic record. These courses reflect the pedagogical, theoretical, and philosophical orientation of the university.

AST A100 – The Solar System. Celestial sphere, measurement of time, earth as a planet, moon, eclipses, planets and their satellites, comets, meteors, theories on origin of solar system. 3 credits. CTL course*

BIOL 10000/100001 – Introduction to the Biological World. Principles of biological organization from molecules through ecosystems. Emphasis on processes common to all organisms and on concepts related to problems of current importance. Includes laboratory exercises and experiments that illustrate selected principles of biology. 4 credits. CTL course*

BUS F260 – Personal Finance. Financial problems encountered in managing individual affairs. Topics may include personal budgeting, installment buying, insurance, home ownership, and investments. No credit toward B.S. in business if taken during university junior or senior year. 3 credits. CTL course*

BUS M201 – Marketing for the Small Business. Overview of marketing management as it applies to the small business. Gain an understanding of traditional and non-traditional marketing techniques. Determine best marketing plan for different types of ventures. 3 credits.

BUS W100 – Principles of Business Administration. An introduction to functional areas of business, tracing the evolution of business, business forms, the role of government and society, relationships between administrators and employees, ethical issues, and the globalization of world markets. Ideal for pre-business students or students of any major desiring a basic understanding of business. 3 credits. CTL course*

BUS W201 – Small Business Management Capstone. Application of concepts studied in previous courses in the Certificate in Small Business Management. A business plan or project will be used in a simulated real world environment to clarify the concepts presented in previous required courses. 3 credits.

CHM 11100 – General Chemistry. A basic introduction to the principles of chemistry including: matter and energy, nomenclature, measurement, atomic structure, nuclear chemistry, chemical bonding, stoichiometry, classification of chemical reactions, kinetics, equilibria, gas laws, liquids, and solids. 3 credits. CTL course*

COM 11400 – Fundamentals of Speech Communication. A study of communication theories as applied to speech; practical communicative experiences ranging from interpersonal communication and small-group process through problem identification and solution in discussion to informative and persuasive speaking in standard speaker-audience situations. 3 credits. CTL course*
CS 11200 – Survey of Computer Science. This course is designed to provide a broad and realistic idea of what computer professionals do and how they do it. It will prepare students for later computing courses, including software development courses, by providing both individual and team hands-on lab experiences with Web design, markup languages (HTML) and JavaScript. Students will be introduced to various professional opportunities and work environments. Current topics in computer science as they relate to society will be covered. Students will gain sufficient programming experience to enable a smooth transition to CS 160 Java programming. 3 credits.

CS 11400 – Introduction to Visual Basic. This course provides an introduction to programming using the Visual Basic language and its integrated development environment. Topics to be covered include the syntax and structure of the VB language; controls, dialog boxes, and other interface tools; menu design; multiple forms; error-trapping; and arrays. Other topics that may be covered include object linking and embedding (OLE); VB for applications; database development using record sets and databound controls; data handling; grids; validation and election; drag and drop; and graphics, and new revisions for interoperability with other languages. 3 credits.

CS 16000 – Introduction to Computer Science I. An introduction to computer concepts and the fundamentals of structured programming in a high-level language. Problem-solving techniques, specifications, stepwise refinement, programming style, structure charts, and program documentation. Programming topics include data types, assignments, input/output, subprograms, selection, iteration, arrays, records, text files, and simple searching and sorting. 4 credits.

CS 16100 – Introduction to Computer Science II. This course continues CS 160. Students will design larger programs to solve more complicated problems. The emphasis is on deepening students’ abilities to deal with abstraction, problem decomposition, and the interaction between program components. Students will develop their professional practice through analysis of more general problems, debugging and testing of their programs, and written presentation of their solutions. Topics include multidimensional arrays, event-driven programs, GUI’s, class inheritance and interfaces, and libraries. 4 credits.

ECET 11100 – Digital Circuits. This course is a study of switching circuits, wave shaping, logic gates, programmable logic devices, arithmetic codes, Boolean algebra, mapping, and other simplification techniques. Discrete devices, programmable logic, small-scale (SSI) and medium-scale (MSI) integrated circuits are used in combinational circuits and sequential logic circuits. 4 credits.

ECON E200 – Fundamentals of Economics. Study of the basic institutions of market economy and the role they play in defining and pursuing economic goals in the US economy. Emphasis is placed upon the effects of existing economic institutions, current economic policy alternatives as they affect both the individual and the society. 3 credits. CTL course*

ENG W131 – Elementary Composition I. Practice in writing organized, well-developed, researched papers for a variety of purposes and audiences. Some analysis of prose style and structure. Note: The maximum number of students in the classroom during the teaching of this course is 22 regardless of how many students are taking the class for dual credit. The instructor cannot have additional students in the classroom, and cannot be responsible for the teaching of other students during the time this course is taught. To ensure that no more than 22 students are in each class, the W131 classroom teacher should consult with the school’s guidance department during registration. 3 credits. PDC. CTL course*

FINA H101 – Art Appreciation. Objectives: to acquaint students with outstanding works of art and to provide an approach to appreciation through knowledge of purposes, techniques, form, and content. No credit toward a fine arts degree. 3 credits, CTL course*
FINA N108 – Introduction to Drawing for Non-majors. Introduces the student to the basic elements of drawing. Line, shape, value, and perspectives will be studied before moving on to the more complex use of color. 3 credits. CTL course *

FINA P133 – Metalsmithing Fundamentals for Non-majors. Understanding of the possibilities of the materials and an appreciation of the use of the tools essential for the creation of forms and objects in metal. Basic techniques, raising, planishing, casting, forging, and fabrication are taught. Inventiveness within the discipline imposed by this traditional art form is encouraged. 3 credits.

FINA S165 – Ceramics for Non-majors. Introduction to ceramics is a creative art course in which students use hand building techniques to create tile, pottery form, and ceramic sculpture. Various lowfire surfaces and firing atmospheres will be explored. Slide lectures will accompany projects, exposing students to the work of various cultures and ceramic artists. Classroom projects and discussions will promote a greater understanding of form and creative processes. 3 credits.

FREN F203 – Second Year French I. Intensive review of grammar and development of vocabulary, reading, conversation, and writing skills. Reading and discussion of modern French fiction and nonfiction, some composition. 3 credits. PDC. CTL course *

FREN F204 – Second Year French II. Intensive review of grammar, and development of vocabulary, reading, conversation, and writing skills. Reading and discussion of modern French fiction and nonfiction, some composition. Weekly attendance in audio laboratory required. 3 credits. PDC. CTL course *

GEOG G109 – Weather and Climate. Introduction to atmospheric processes responsible for weather changes. Elements of climatology and their variation in time and space. Weather forecasting, weather modification, and severe weather. 3 credits.

GEOL G103 – Earth Science: Materials and Processes. Introduction to origin and classification of minerals and rocks. Relationships among rock types, rock structures, surficial geological processes of running water, sub-surface water, glaciations, wind, waves, tides, and landform evolution. Geologic time. Internal processes, volcanism, plutonism. Plate tectonics. 3 credits. CTL course *

GER G111 – Elementary German I. Introduction to German language as well as to cultures of German-speaking countries. Emphasis on development of communicative competence in speaking, listening, reading, and writing. 4 credits. PDC. CTL course *

HIST H105 – American History I. Colonial period, Revolution, Confederation and Constitution, National period to 1877. 3 credits. PDC. CTL course *

HIST H106 – American History II. 1877 to present. Political history forms framework with economic, social, cultural, and intellectual history interwoven. Introductions to historical literature, source material, and criticism. 3 credits. PDC. CTL course *

MA 15300/MA 15400 – Algebra and Trigonometry I & II. Algebra and trigonometry topics designed to prepare students for calculus. This two-course combined sequence allows schools some flexibility in the order topics are presented. 6 credits. PDC. CTL course *

MA 16500 – Analytic Geometry and Calculus I. Introduction to differential and integral calculus of one variable, with applications. Conic sections. High school equivalent must be AP Calculus AB. 4 credits. PDC. CTL course *
MA 16600 – Analytic Geometry and Calculus II. Continuation of MA 165. Vectors in two and three dimensions. Techniques of integration, infinite series, polar coordinates, surfaces in three dimensions. High school equivalent must be AP Calculus BC. 4 credits. PDC. CTL course*

MA 21300 – Finite Mathematics. Basic logic, set theory. Elementary probability, Markov chains, vectors, matrices, linear systems, elementary graph theory. Applications to finite models in the managerial, social, and life sciences; and computer science. 3 credits. CTL course*.

PHIL 11000 – Introduction to Philosophy. An introduction to basic problems and types of philosophy, with special emphasis on the problem of knowledge and nature of reality. 3 credits. CTL course*

PHIL 11100 – Ethics. A study of the nature of moral value and obligation. Topics such as the following will be considered: different conceptions of the good life and standards of right conduct; the relation of nonmoral and moral goodness; determinism, free will, and the problem of moral responsibility; the political and social dimensions of ethics; the principles and methods of moral judgment. Readings will be drawn from both contemporary and classical sources. 3 credits. CTL course*

PHYS 22000 – General Physics. Mechanics, heat, and sound, primarily for students not specializing in physics. 4 credits. PDC. CTL course*

POL S161 – Principles of Sociology. Nature of interpersonal relationships, societies, groups, communities, and institutional areas such as the family, politics, education, the economy, and religion. Includes social process operating within these areas; significance for problems of social change, and social stratification. Teachers must be able to demonstrate current knowledge of Sociology thought and practice. 3 credits. CTL course*

SPAN S203 – Second-Year Spanish I. Meets three hours a week. Continuation of S111-S112/S113 with grammar review and increased emphasis on communication skills. Reading and discussion in Spanish of contemporary literature, essays, and/or cultural readings. Practice in composition. 3 credits. PDC. CTL course*

SPEA E272 – Introduction to Environmental Sciences. Application of principles from the life and physical sciences to the understanding and management of the environment. Emphases will be placed on (1) the physical and biological restraints on resource availability and use, and (2) the technological and scientific options to solving environmental problems. 3 credits.

STAT 12500 – Communicating with Statistics. An introduction to the basic concepts and methods in statistical reasoning that are commonly referenced in the print media. Topics include data collection methods, descriptive statistics, basic techniques of estimation, and theory testing. Students will analyze and interpret statistics relating to contemporary problems in politics, business, science and social issues. High School equivalent is Honors Statistics. 3 credits.
STAT 30100 – Elementary Statistical Methods I. Introduction to statistical methods with applications to diverse fields. Emphasis on understanding and interpreting standard techniques. Data analysis for one and several variables, design of samples and experiments, basic probability, sampling distributions, confidence intervals and significance tests for means and proportions, correlation and regression. Software is used throughout. High school equivalent must be AP Statistics. 3 credits.

THTR 13400 – Fundamentals of Performance. An introduction to the art of acting as practiced in the world today. 3 credits. CTL course*

THTR 20100 – Theatre Appreciation. Understanding and appreciation of the theatre's role in the modern world. Includes a seminar approach in discussion of the nature of theatre, critical analysis of drama, the actor, the director, design, and careers in the theatre. Also deals with professional, regional, community, and educational theatre. 3 credits. CTL course*

VCD N198 – Introduction to Photography for Nonmajors. This course focuses on mastering camera operation, exposure, and composition. Assignments will be shot digitally or on slide film; no darkroom work will be involved. Evaluation will be based on technical competency and aesthetic value. General historical background and an overview of current developments in photography also will be provided. 3 credits.

VCD P151 – Design Fundamentals I. In Design Fundamentals, the student becomes familiar with the vocabulary and elements of the visual language. Also, the expressive powers of the elements of line, shape, texture, space, and color are explored through a series of sequential exercises. Many different problems in building visual units provide the training artists need to make individual, yet clear, expressive, and complete statements. 3 credits.

VCD P243 – Photography Fundamentals. This course is designed to introduce the student to the basic understanding of photography in relationship to both the fine arts and the application of photography to advertising. Basic use of the camera and the darkroom will be introduced. 3 credits.

*CTL is the Indiana Commission for Higher Education’s indication that a course has been deemed “transferable” to all public universities in Indiana.

Note: If teachers are interested in getting approval to offer a course that is not listed, they can contact the Collegiate Connection office for more information.