

DRFT-120 Descriptive Geometry 3 cr.

Descriptive geometry is a study of points, lines and planes in their spatial relationships. Problems in finding their true positions, lengths and shapes are solved by the principles of orthographic projection. Semester offered: Spring.

DRFT-150 Computer-Aided Drafting (CAD) 4 cr.

A course designed to train students in the use of computer-aided drafting equipment to produce engineering drawings in two-dimensional format, using the basic draw and edit commands. Corequisite: DRFT 110. Semester offered: Fall and Spring.

DRFT-201 Investigation in Civil Drafting 1 cr.

This course involves an introduction to the various aspects of civil drafting and engineering technology. Students will have an opportunity to investigate working environments and look at actual drafting and design projects within the industry. These areas may include, but not be limited to, street and highway design, facilities management, water resource development, landfill and waste management design, structural steel and concrete structures, canal and dam design, surveying, geologic, oil, gas and mining engineering technology. An overview of various aspects of the design criteria and CAD drafting capabilities will be discussed and studied. Prerequisite: DRFT 115. Semester offered: Fall.

DRFT-210 Technical Drafting III 4 cr.

Design and working drawings detail, subassembly and assembly drawings, and bill of materials and revisions. Manufacturing methods and related drawing formats will be covered. Tolerance Studies, fits, allowances and functional geometric tolerance will be examined. Prerequisites: DRFT 115, DRFT 150, MATH 180, and MATH 185. Corequisite: MATH 188. Semester offered: Fall.

DRFT-220 Electronics Drafting 4 cr.

This course includes the symbols, terminology, standards and techniques of electro-mechanical drafting. Class work involves drawing electronic, electrical, block, logic, wiring and interconnection diagrams, printed circuit board design, layout and artwork construction, electro-mechanical packaging, detail and assembly drawing. Emphasis on the use of AutoCAD for drawing production. Prerequisites: DRFT 110, DRFT 150, and MATH 096 or MPE; Corequisite: MATH 180 and MATH 185. Semester offered: On Demand.

DRFT-225 Piping Design and Drafting 4 cr.

A course in the design and drafting of piping systems including pipe fittings, valves, pumps, and vessels and their symbols. Prerequisite: DRFT 150. Semester offered: On Demand.

DRFT-247 Const Practices and Estimating 4 cr.

This course involves quantity calculations including excavation, foundations, concrete and masonry structures, steel, framing, flooring, drywall and wetwall, roofing, insulation, and finish work. Corequisite: DRFT 248, MATH 180, and MATH 185. Semester offered: Spring.

DRFT-248 Civil Drafting I 4 cr.

This course comprises instruction in the symbols, terminology, standards and techniques of civil drafting, mapping and topographic

drafting. Class work involves material relating to land development, geology, oil and gas, mining, archaeology and site drawing; legal descriptions and surveys, including metes and bounds and U.S. Land System; cross-sections; contours, plan and profile drawings; drainage systems, and calculations relating to area, volume, angles, closures and earthwork. Emphasis on the use of AutoCAD for drawing production. Prerequisites: DRFT 110, 150, and MATH 096 or MPE; Corequisites: MATH 180 and MATH 185. Semester offered: Fall.

DRFT-255 Statics and Strength of Material 4 cr.

Practical approach to applying concepts of statics and strength of materials to solution of force systems. Prerequisite: MATH 180 and MATH 185. Semester offered: Spring.

DRFT-260 Advanced AutoCAD 4 cr.

This course is a continuation of beginning Computer-Aided Drafting and is taught on PC computers using the latest release of AutoCAD by Autodesk, Inc. The more advanced commands are included in topics covered by this course, such as model space and paper space, digitizing and three-dimensional drawing. Prerequisite: DRFT 150 or equivalent. Semester offered: Fall and Spring.

DRFT-265 AutoCAD for Theatre 4 cr.

This course includes techniques for using AutoCAD drafting software in the areas of set and costume design on the personal computer. The courses technical content addresses the subject from an intermediate perspective for graphic design in theatre. There will be two major projects required for course completion. This course requires extensive CAD lab hours to complete project assignments. Prerequisites: DRFT 110 and DRFT 150. Semester offered: Spring.

DRFT-280 Cooperative Education 1-12 cr.

This course provides an introduction to industry and the application of design and drafting technology principles. Students are supervised and rated by both the instructor and employer. Semester offered: On Demand.

DRFT-295 SPTO: (Special Topics) 1-4 cr.

Special or specific topic course to meet the needs of students. Topics and credits are announced in the Schedule of Classes. These courses may be used as electives for Associate degree requirements. May be repeated one or more times for additional credit. No more than 6 credits of special topic courses can be used toward a degree.

EARLY CHILDHOOD EDUCATION**ECED-105 SPIN: (Special Interest) 1-3 cr.**

Course is designed to address a variety of subjects required to meet the needs of lifelong learning students. Not available for transfer nor applicable as an elective.

ECED-120 Guiding Young Children 3 cr.

Explores various theories of child guidance and the practical application of each. Provides developmentally appropriate methods for guiding children and effective strategies and suggestions for facilitating positive social interactions. Appropriate strategies for preventing and dealing with violence, aggression, anger, and stress will be included.

Emphasis is placed on helping children become self-responsible, competent, independent, and cooperative learners. Prerequisites: APEN 070+ or ENGL 099; APRD 081+ or RDNG 113.

ECED-145 Health, Safety and Nutrition 2 cr.

Provides information related to standards and practices that promote children's physical and mental well-being, sound nutritional practices, and maintenance of safe learning environments. Includes information for developing sound health and safety management procedures for the prevention of childhood illnesses and communicable diseases. Examines the many nutritional factors that are important for children's total development, healthy eating habits, physical activity, and rest. Students gain knowledge necessary for creating safe learning environments for decreasing risk and preventing childhood injury. Prerequisites: APEN 070+ or ENGL 095; APRD 058+ or RDNG 095.

ECED-150 Professionalism 2 cr.

Introductory class in foundations of education. Provides a broad-based orientation to the field of early care and education. Early childhood history, philosophy, ethics and advocacy are introduced. Basic principles of early childhood systems are explored. Multiple perspectives on early care and education are introduced. Professional responsibilities such as cultural responsiveness and reflective practice are examined. Prerequisites: APEN 070+ or ENGL 095; APRD 058+ or RDNG 095.

ECED-175 Curriculum Development and Implementation I 5 cr.

Focuses on developmentally appropriate content in early childhood programs. It addresses content that is relevant for children birth through age three and developmentally appropriate ways of integrating content into teaching and learning experiences. Information on adapting content areas to meet the needs of children with special needs and the development of IFSPs is included. Curriculum development in all areas, including literacy, numeracy, the arts, health, science, social skills, and adaptive learning for children, birth through age eight, is emphasized. Prerequisites: ECED 225, ECED 150, ECED 145, APEN 085+ or ENGL 099, APRD 081+ or RDNG 113.

ECED-222 Introduction to Reading and Literacy 3 cr.

Designed to prepare early childhood professionals for promoting children's emergent literacy and reading development. Through a developmental approach, the course addresses ways in which early childhood professionals can foster young children's phonemic awareness, literacy problem solving skills, fluency, vocabulary, comprehension, and language development. Provides the foundation for early childhood professionals to become knowledgeable about literacy development in young children. Instructional approaches, theory-based, and research-based strategies to support the emergent literacy and reading skills of native speakers and English language learners will be presented.

ECED-225 Child Growth and Development and Learning 3 cr.

Provides students with the foundation for becoming a competent early childhood professional and a knowledge of how young children grow, develop and learn. Major theories of child development will

be integrated with all aspects of development including biological-physical, social, cultural, emotional, cognition, and language domains. The adult's role in supporting each child's growth, development and learning will be emphasized. Prerequisites: PSYC 120, APEN 085+ or ENGL 099, APRD 081+ or RDNG 113.

ECED-235 Family and Community Collaboration 3 cr.

Examines the involvement of families from diverse cultural and linguistic backgrounds in early childhood programs. Establishing collaborative relationships with parents and others involved with children in early childhood settings are discussed. Strategies for communicating with parents and guardians about their children and incorporating the families' goals and desires for their children into the early childhood program will be included. Prerequisites: APEN 070+ or ENGL 099; APRD 081+ or RDNG 113.

ECED-255 Assessment of Children 3 cr.

Familiarizes students with a variety of culturally appropriate assessment methods and instruments, including systematic observation. Addresses the development and use of formative and summative program evaluation to ensure comprehensive quality of the total environment for children, families, and the community. Students will develop skills for evaluating the assessment process and involving other teachers, professionals and families in the process. Prerequisites: APEN 085+ or ENGL 099, APEN 851 or ENGL 099, APRD 081+ or RDNG 113.

ECED-295/299 SPTO: (Special Topics) 1-3 cr.

Special or specific topic course to meet the needs of students. Topics and credits are announced in the Schedule of Classes. These courses may be used as electives for Associate degree requirements. May be repeated one or more times for additional credit. No more than 6 credits of special topic courses can be used toward a degree.

ECONOMICS

ECON-105 SPIN: (Special Interest) 1-3 cr.

Course is designed to address a variety of subjects required to meet the needs of lifelong learning students. Not available for transfer nor applicable as an elective.

ECON-212 Economic Development of the US 3 cr.

This course is a history of economic development in the United States from colonial days to the present. Such issues as the transformation of America from an agricultural economy to an industrial economy and finally to a post-industrial age are discussed. The changing roles of government, education, money and banking, and industry are major topics. Semester offered: On Demand.

ECON-251 Macroeconomics 3 cr.

Covers supply and demand, the danger of price controls, the role of government in free markets, international trade, international finance, currency exchange rates, purchasing power parity, the balance of payments, national income accounting, elements of long-run economic growth, inflation, unemployment, the business cycle, economic models explaining changes in the business cycle, fiscal policy, monetary policy, and the money supply. The application of economics to the financial markets is stressed along with economic indicators. Prerequisites: