DRLT 290 Occupational Work Experience/Drywall-Lathing

Units: 1.0 TO 4.0 **Hours:** 5.0 TO 20.0 Laboratory
Transferable: No

Occupational work experience for students who have a job related to their major. A training plan is developed cooperatively between the employer, college and student. (P/NP grading) 75 hours per semester paid work = 1 unit. 60 hours non-paid (volunteer) work per semester = 1 unit. May be taken for a maximum total of 16 units. Minimum 2.00 GPA. REQUIRED: Declared vocational major.

Early Childhood Education: see Child Development
Earth Science: see Geology, Geography

ECOLOGY

ECOL 1 Conservation of Natural Resources

Units: 4.0 **Hours:** 3.0 Lecture and 3.0 Laboratory
Transferable: CSU, UC; CSU-GE:B2, B3, IGETC:5B; GAV-GE:B2, B3

This course examines the fundamentals of ecology (the study of the relationships between organisms and their environment) with special emphasis on human effects on the environment. Topics of discussion will include ecosystem dynamics, resources, pollution, population growth, and the clash between economic and political policy and the environment. ADVISORY: Eligible for English 250 and English 260.

ECONOMICS

ECON 1 Principles of Macroeconomics

Units: 3.0 **Hours:** 3.0 Lecture
Transferable: CSU, UC; CSU-GE:D2, IGETC:4B; GAV-GE:D2, F; CAN:ECON2

Introduction to the principles of macroeconomics, social organization of the economy; supply and demand; the determinants of national income and production, economic growth, the global economy and trade, employment, prices, savings and investment; the nature and effectiveness of monetary and fiscal policy. This course has the option of a letter grade or pass/no pass. ADVISORY: Eligible for English 1A and Mathematics 233.

ECON 2 Principles of Microeconomics

Units: 3.0 **Hours:** 3.0 Lecture
Transferable: CSU, UC; CSU-GE:D2, IGETC:4B; GAV-GE:D2; CAN:ECON4

Introduction to microeconomic principles and theory; supply, demand; product and factor price determination, resource allocation, costs, revenues, and profits under different competitive situations; international trade; government regulation and taxation. Note: Economics 1 is not a prerequisite for Economics 2. This course has the option of a letter grade or pass/no pass. ADVISORY: Eligible for English 260, English 250 and Mathematics 233.

ECON 10 Fundamentals of Economics

Units: 3.0 **Hours:** 3.0 Lecture
Transferable: CSU, UC; CSU-GE:D2, IGETC:4B; GAV-GE:D2

A survey of economic concepts and systems. Topics to be covered include production and consumption, pricing and competition, economic growth, inflation, employment, money and banking, and international trade. Not open to students with credit in Economics 1 or 2. This course has the option of a letter grade or pass/no pass. ADVISORY: Eligible for English 250, English 260.

ECON 11 Statistics for Business and Economics

Units: 4.0 **Hours:** 4.0 Lecture
Transferable: CSU, UC; CSU-GE:B4, IGETC:2A; GAV-GE:B4

Statistical methods for business/economics analysis; descriptive statistics, inference, correlation and regression, probability, time series analysis. This course has the option of a letter grade or pass/no pass. This course is also listed as BUS 11. PREREQUISITE: Mathematics 233.

ECON 14 Personal Finance

Units: 3.0 **Hours:** 3.0 Lecture
Transferable: CSU

This course is designed to assist individuals to analyze their financial affairs for lifelong decision making. Elements and concepts of financial planning and decision making in the areas of budgeting, taxes, borrowing, money management, insurance, investments, retirement, and estate planning will be examined. This course is also listed as BUS 14. This course has the option of a letter grade or pass/no pass. ADVISORY: Math 400

Education: see Child Development, Liberal Arts with Elementary Education Emphasis

ENGINEERING

ENGR 1 Engineering Graphics

Units: 3.0 **Hours:** 2.0 Lecture and 3.0 Laboratory
Transferable: CSU, UC; CAN:ENGR2

An introduction to the graphical and visual communication of the engineering design process. Topics will include the design process, visualization, free-hand sketching, orthographic projection, multi views, auxiliary views, section views, dimensioning and tolerances. Computer-aided-drafting (CAD) software will be used extensively in conjunction with traditional methods to highlight the strengths of multiple communication methodologies. ADVISORY: Eligible for English 250 and English 260; Mathematics 1A - may be concurrent, and CSIS 10 - May be concurrent.

ENGR 2 Statics

Units: 3.0 **Hours:** 3.0 Lecture
Transferable: CSU, UC; CAN:ENGR8

Vector statics. Force, moment, couple, system isolation, adequacy of constraint, concentrated and distributed loads, fluid statics, flexible cables, friction and virtual work. Bridge design project. PREREQUISITE: Mathematics 1A and Mathematics 1B and Physics 4A with a grade of 'C' or better.

ENGR 3 Electrical Circuits/Devices and Systems

Units: 3.0 **Hours:** 3.0 Lecture
Transferable: CSU, UC; CAN:ENGR12

Natural, forced, and steady-state response by impedance, exponential, pole-zero and phasor methods; solid state; digital circuits and laplace transform methods are introduced. PREREQUISITE: Mathematics 1A with a grade of 'C' or better. May be taken concurrently. ADVISORY: Physics 4B with a grade of "C" or better and Mathematics 2C.

ENGR 4 Properties Of Materials

Units: 3.0 **Hours:** 3.0 Lecture
Transferable: CSU, UC; CAN:ENGR4

Basic principles of physics and chemistry are used to determine the quantitative relationships which describe the behavior of solids. Particular emphasis is placed upon the relationship between the structure and mechanical properties of crystalline solids. Applications consider control of properties as an engineering design variable. A term paper based upon review of the periodical technical literature is required. PREREQUISITE: Chemistry 1A and Physics 4A.

ENGR 5 C++ Scientific Programming

Units: 3.0 **Hours:** 2.0 Lecture and 3.0 Laboratory
Transferable: CSU, UC; CAN:CSCI4

An introduction to computer problem solving and programming using the C++ language for science and engineering majors. Students will write programs for a variety of scientific and mathematical applications. PREREQUISITE: Mathematics 1A ADVISORY: Completion of CSIS 10.