

DRLT 290 Occupational Work Experience/Drywall-Lathing**Units:** 1.0 TO 4.0 **Hours:** 5.0 TO 20.0 Laboratory**Transferable:** No

College credit for learning experience obtained on the job in accordance with a training plan developed cooperatively between the employer, college and student. 75 hours per semester per unit or 60 hours per semester for unpaid experience. This is a pass/no pass course. May be taken for a maximum of 16 work experience units. **PREREQUISITES:** Required: Declared vocational major. Concurrent enrollment in seven or more units (including CWE units, except for summer school. For summer school, enrollment in one other class is required.) Minimum 2.00 GPA.

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 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; 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, Liberal Arts with Elementary Education Emphasis

ENGINEERING**ENGR 1 Engineering Graphics****Units:** 3.0 **Hours:** 2.0 lecture 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 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.

ENGR 10A Introduction to Engineering I

Units: 2.0 **Hours:** 1.5 lecture 1.5 Laboratory
Transferable: CSU, UC

Engineering 10A introduces students to the engineering profession. Topics will include an introduction to the various engineering disciplines; the role of engineers and engineering in society; the curriculum requirements for the various engineering disciplines at different four-year institutions; academic success strategies; personal and professional development techniques; an introduction to the engineering design process; an introduction to engineering problem-solving methodologies; engineering ethics; communication skills; and working as a member of a team. Engineering 10A and 10B, together, are equivalent to Engineering 10 at San Jose State University. **PREREQUISITE:** Math 8B or equivalent

ENGR 10B Introduction to Engineering II

Units: 2.0 **Hours:** 1.5 lecture 1.5 Laboratory
Transferable: CSU, UC

Engineering 10B continues the introduction to the engineering profession begun in Engineering 10A. Topics will include an introduction to experimental methods and data analysis; continued introduction to the engineering design process with more challenging design problems and the introduction of analysis in engineering design; engineering problem-solving using the personal computer; continued personal and professional growth techniques; communication skills; and working as a member of a team. Engineering 10A and 10B, together, are equivalent to Engineering 10 at San Jose State University. **PREREQUISITE:** Engineering 10A

ENGLISH**ENGL 1A Composition**

Units: 3.0 **Hours:** 3.0 Lecture
Transferable: CSU, UC; CSU-GE:A2, IGETC:1A; GAV-GE:A2; CAN:ENGL2, ENGL SEQ A

This is a writing course which emphasizes expository writing, argumentative writing, and critical reading of expository prose. It is meant to train students in clear thinking and reasoned support of ideas. Students will be given the opportunity to read models of good expository and argumentative prose and learn the techniques of good writing. These include choosing appropriate subjects, developing restricted, unified, and precise theses and presenting supporting evidence in a logical, lucid, and effective manner. To achieve this end, students write no fewer than six essays and read at least five works, two of which are book length. **PREREQUISITE:** English 250 and English 260 or English 250 and SSCI 270A or English 250 and SSCI 270B with a grade of 'C' or better or satisfactory score on the English placement examination.

ENGL 1B Composition and Literature

Units: 3.0 **Hours:** 3.0 Lecture
Transferable: CSU, UC; CSU-GE:C, IGETC:3B; GAV-GE:C2; CAN:ENGL4, ENGL SEQ A

English 1B continues the work begun in 1A, but now the emphasis shifts to writing expository prose in conjunction with reading and analyzing imaginative literature. Students are to write as fledgling critics and use the text as a basis for other forms of reflection. The reading requirement includes short stories, poetry, drama, and at least two novels. Course work will also include fundamentals of research writing. **PREREQUISITE:** English 1A with a grade of "C" or better.

ENGL 1C Critical Reasoning and Writing

Units: 3.0 **Hours:** 3.0 Lecture
Transferable: CSU, UC; CSU-GE:A3, IGETC:1B; GAV-GE:C2

This course is designed to develop critical thinking, reading, and writing skills beyond the level achieved in English 1A. The emphasis is on critical analysis of arguments and the development of the ability to integrate the principles of critical thinking into essay writing. **PREREQUISITE:** English 1A with a grade of "C" or better.

ENGL 2A Introduction to Poetry

Units: 3.0 **Hours:** 3.0 Lecture
Transferable: CSU, UC; CSU-GE:C2, IGETC:3B; GAV-GE:C2, F

This is a transfer literature video course in which the student learns to analyze and discuss poetry. It is based on the acclaimed video series uVoices and Visions which focuses on 13 American poets. **PREREQUISITE:** Eligible for English 1A.

ENGL 2B Introduction to Multi-Cultural Literature

Units: 3.0 **Hours:** 3.0 Lecture
Transferable: CSU, UC; CSU-GE:C2, IGETC:3B; GAV-GE:C2, F

Students will examine the concept of ethnicity in the context of contemporary American multi-ethnic literature: Native American, Hispanic American, Black American, Asian American. Students will critique this literature using the accepted elements of literary criticism. They will read and analyze selections from each literature and explain their results in journals, oral presentations, a research project and examinations. **PREREQUISITE:** Eligible for English 1A.

ENGL 2C Introduction to Film and Fiction

Units: 3.0 **Hours:** 3.0 Lecture
Transferable: CSU, UC; CSU-GE:C2, IGETC:3B; GAV-GE:C2

This is a literature course in analysis of the novel and film as art forms. The student will read several novels, view the films based on the novels, and discuss the difference in techniques, both orally and in writing. **PREREQUISITE:** Eligible for English 1A.

ENGL 2E Introduction to Women Writers

Units: 3.0 **Hours:** 3.0 Lecture
Transferable: CSU, UC; CSU-GE:C2, IGETC:3B; GAV-GE:C2, F

This is a transfer literature class which examines the history of women as writers and distinguishes themes in women's literature using the tools of literary criticism. **PREREQUISITE:** Eligible for English 1A.

ENGL 2F Children's Literature

Units: 3.0 **Hours:** 3.0 Lecture
Transferable: CSU, UC; CSU-GE:C2, IGETC:3B; GAV-GE:C2

A survey of texts for elementary and intermediate grades, with a focus on literary analysis, criticism and evaluation. Study of historical backgrounds and development of genres of children's literature in a cross section of cultures. This course has the option of a letter grade or pass/no pass. **PREREQUISITE:** English 1A.

ENGL 2H Mexican-American Literature

Units: 3.0 **Hours:** 3.0 Lecture
Transferable: CSU, UC; CSU-GE:C2, IGETC:3B; GAV-GE:C2, F

An interpretive analysis of Chicano literature from its origins to its contemporary status. Emphasis will be on short stories, essays, poetry, drama, and novels as a means of providing an expansive view of the Chicano experience and the literature that it creates. This course analyzes the interrelationships between drama, literature, art, music, dance, and folklore as a reflection of the Chicano. **PREREQUISITE:** Eligible for English 1A

ENGL 2J Mythology

Units: 3.0 **Hours:** 3.0 Lecture
Transferable: CSU, UC; CSU-GE:C2, IGETC:3B; GAV-GE:C2

This course is a survey of myths from around the world, with an emphasis on literary analysis of the myths. The course covers the purposes and types of myths; the development of myths and mythological characters, the recurring elements of mythological structures, the influence of mythology on contemporary texts. **PREREQUISITE:** Eligible for English 1A.

ENGL 4A British Literature - 449 to 1798 A.D.

Units: 3.0 **Hours:** 3.0 Lecture
Transferable: CSU, UC; CSU-GE:C2, IGETC:3B; GAV-GE:C2; CAN:ENGL8, ENGL SEQ B

This course is a study of the masters of British literature. In English 4A the student studies the years 449 through 1798 A.D. **PREREQUISITE:** Eligible for English 1A.