

**CIS 198 Install and Configure Windows Vista 1 Unit**  
*Advisory: Computer Applications and Office Systems 102L; English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263.*  
*One hour lecture.*  
 Provides knowledge and skills to setup, configure, use and troubleshoot Windows Vista software and security features.

**CIS 200W Topics in Computer Information Systems 1 Unit**  
**CIS 200X 2 Units**  
**CIS 200Y 3 Units**  
**CIS 200Z 4 Units**  
*Credit course - Does not apply to De Anza Associate degree.*  
*One hour lecture for each unit of credit.*  
*(Any combination of Computer Information Systems 200W, 200X, 200Y and 200Z may be taken for up to six times, not to exceed 18 units, as long as the topics/projects are different each time.)*  
 A planned program of exposure to fundamental concepts and applications of selected Computer Information Systems topics. Concepts and theories as applied to the specific topic.

## COOP Ed Work Experience

**COOP 51 Occupational Work Experience 1 Unit**  
**COOP 51W 2 Units**  
**COOP 51X 4 Units**  
**COOP 51Y 6 Units**  
**COOP 51Z 8 Units**

*Prerequisite: Must be in a job related to declared occupational program/educational goal. Concurrent enrollment limited to one other course.*  
*Fifty hours of paid employment per quarter for each unit of credit.*  
*(May be taken until 24 units of COOP have been earned.)*  
 Assess career/life development and work activities by introduction to the concept of career paths within occupational choices, and awareness of cultural/global diversity and generational differences in the work environment. Learning/performance objectives agreed upon by the student and employer will be identified and carried out. View objectives in terms of a planned series of experiences. Participation in COOP will assist the student in planning activities that will facilitate the confirming or denying of current academic or career choice.

**COOP 53 Occupational Volunteer Community Service Learning Internship 1 Unit**  
**COOP 53W 2 Units**  
**COOP 53X 4 Units**  
**COOP 53Y 6 Units**  
**COOP 53Z 8 Units**

*Prerequisite: Must be volunteering in a service learning agency related to declared occupational program/educational goal; concurrent enrollment limited to one other course.*  
*Forty hours of unpaid internship per quarter for each unit of credit in a service learning environment.*  
*(May be taken until 24 units of COOP have been earned.)*  
 Volunteer in an approved community agency with individually planned and supervised learning experiences related to occupational goals and designed to help meet human needs in the community. Desirable work habits, attitudes, skills, knowledge, career awareness, and exposure to cultural and generational diversity. Experience setting and achieving on-the-job learning/performance objectives related to occupational goals and appropriate to the service learning internship. Consultations with individually assigned faculty members.

**COOP 71 General Work Experience 1 Unit**  
**COOP 71W 2 Units**  
**COOP 71X 4 Units**  
**COOP 71Y 6 Units**  
**COOP 71Z 8 Units**

*Prerequisite: Concurrent enrollment limited to one other course.*  
*Fifty hours of paid employment per quarter for each unit of credit.*  
*(May be taken until nine units have been earned in this course within a maximum of 24 units in all COOP courses.)*  
 Transferable skills gained under actual working conditions. Develop an understanding, appreciation and respect for work, peers, and awareness of cultural/global diversity and generational differences in the work environment. Through holding a job, fulfilling work related assignments and participating in on-campus activities, students are assisted in the process of developing a concept of self, understanding roles in the work environment and setting realistic goals. An assigned faculty coordinator helps students focus on the job skills needed for transition into a career.

**COOP 73 General Volunteer Service Learning Community Internship 1 Unit**  
**COOP 73W 2 Units**  
**COOP 73X 4 Units**  
**COOP 73Y 6 Units**  
**COOP 73Z 8 Units**

*Prerequisite: Concurrent enrollment limited to one other course.*  
*Forty hours of unpaid internship per quarter for each unit of credit in a service learning environment.*  
*(May be taken until nine units have been earned in this, within a maximum of 24 units in all COOP courses.)*  
 Volunteer in an approved community agency with individually planned and supervised learning experiences that are designed to help meet human needs in the community. Desirable work habits, attitudes, skills, career awareness, and exposure to cultural and generational diversity. Experience in setting and achieving learning/performance objectives appropriate to the service learning internship. Consultations with individually assigned faculty members.

## Counseling

**COUN 80W Special Topics in Counseling 1/2 Unit**  
**COUN 80X 1 Unit**  
**COUN 80Y 2 Units**  
**COUN 80Z 3 Units**

*Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.*  
*One hour lecture for each unit of credit.*  
*(Any combination of Counseling 80W, X, Y, Z may be taken up to six times, not to exceed 18 units, as long as the topics/projects are different each time.)*  
 Selected counseling topics with a focus on academic and personal development.

**COUN 100 Orientation to College 1/2 Unit**  
**COUN 100X 1 Unit**

*Credit course - Does not apply to De Anza Associate degree.*  
*Two hours lecture-laboratory for each unit of credit.*  
*Pass-No Pass (P-NP) course.*  
 An orientation to De Anza College that includes programs, services, policies, degrees, certificates, transfer requirements, and college culture. Focus will be on strategies needed for academic success and the development of a one quarter Educational Plan.

## Dance

**DANC 22 Body Awareness and Conditioning for Dancers 1 Unit**

*(See general education pages for the requirement this course meets.)*  
*Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.*  
*(Also listed as Physical Education 22. Student may enroll in either department, but not both, for credit.)*  
*Two hours lecture-laboratory.*  
*(Any combination of Dance/Physical Education 22 may be taken up to six times for credit as long as the topics/projects are different each time.)*  
 Principles of dance and practice of body awareness focusing on center, floor and barre work derived from ballet, contemporary dance, and other psycho-physical disciplines. Topics may include, but are not limited to, body alignment and centering, concentration and relaxation, development of the kinesthetic sense, and exploration of the body/mind connection.

**DANC 22K Theory and Technique of Ballet I 1 Unit**

*(See general education pages for the requirement this course meets.)*  
*Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263; Dance 22 or Physical Education 22.*  
*(Also listed as Physical Education 22K. Student may enroll in either department, but not both, for credit.)*  
*Two hours lecture-laboratory.*  
*(Any combination of Dance/Physical Education 22K, 22L, and 22M may be taken up to six times for credit for the family of courses.)*  
 Introduction to the discipline and creative art of classical ballet, including the development of elementary movement techniques, a working ballet vocabulary, exposure to great works and artists from a global perspective, theory and practice of barre and center floor exercises.

**DANC 22L Theory and Technique of Ballet II 2 Units**

(See general education pages for the requirement this course meets.)

Advisory: Dance/Physical Education 22K.; English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263.

(Also listed as Physical Education 22L. Student may enroll in either department, but not both, for credit.)

Four hours lecture-laboratory.

(Any combination of Dance/Physical Education 22K, 22L, and 22M may be taken up to six times for credit for the family of courses.)

Principles and practice of the discipline and creative art of classical ballet, combining: traditional techniques of Russian, French and Italian schools; Barre and center floor work emphasizing alignment/centering, motion through space, and the acquisition of an intermediate working ballet vocabulary.

**DANC 23A Theory and Technique of Contemporary (Modern) Dance I 1 Unit**

(See general education pages for the requirement this course meets.)

Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263.

(Also listed as Physical Education 23A. Student may enroll in either department, but not both, for credit.)

Two hours lecture-laboratory.

(Any combination of Dance/Physical Education 23A and 23B may be taken up to six times for credit for the family of courses.)

Introduction to the discipline and creative art of contemporary dance. Exposure to a basic movement repertoire from global artists. Development of a working contemporary dance vocabulary. Theory and practice of basic technique.

**DANC 23B Theory and Technique of Contemporary (Modern) Dance II 2 Units**

(Formerly Dance 23C.)

(See general education pages for the requirement this course meets.)

Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263; Dance/Physical Education 23A.

(Also listed as Physical Education 23B. Student may enroll in either department, but not both, for credit.)

Four hours lecture-laboratory.

(Any combination of Dance/Physical Education 23A and 23B may be taken up to six times for credit for the family of courses.)

The discipline and creative art of contemporary dance focusing on practice of theory, technique and movement explorations in time and space, developing a working intermediate contemporary dance vocabulary.

**DANC 23H Dance Composition 2 Units**

Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263.

(Also listed as Physical Education 23H. Student may enroll in either department, but not both, for credit.)

Four hours lecture-laboratory.

(Any combination of Dance/Physical Education 23H may be taken two times for credit.)

Introduction to the fundamental elements and techniques of individual and group dance composition.

**DANC 23L Theory and Technique of Hip-Hop I (Popular American Dance) 1 Unit**

Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263.

(Also listed as Physical Education 23L. Student may enroll in either department, but not both, for credit.)

Two hours lecture-laboratory.

(Any combination of Dance/Physical Education 23L and 23M may be taken up to six times for credit for the family of courses.)

Introduction to the art of hip-hop dance. Exposure to great works and artists of the field. Development of a working hip-hop dance vocabulary. Theory and practice of basic technique.

**DANC 23M Theory and Technique of Hip-Hop II (Popular American Dance II) 1 Unit**

(See general education pages for the requirement this course meets.)

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

(Also listed as Physical Education 23M. Student may enroll in either department, but not both, for credit.)

Two hours lecture-laboratory.

(Any combination of Dance/Physical Education 23L and 23M may be taken up to six times for credit for the family of courses.)

Explorations in the discipline of creative arts through the theory and practice of hip-hop dance intermediate/advanced level technique, with an integrated fitness approach that focuses on developing the stabilization muscles of the center of the body. Concentration will be on muscles of the torso, back, hips, inner and outer thighs, chest and abdominals will be used in conjunction with breathing, posture,

and muscle awareness. Exposure to great works and multicultural artists of the field. Development of a working hip-hop vocabulary and performance skills.

**DANC 24A Theory and Technique of Social Dance I 1 Unit**

(See general education pages for the requirement this course meets.)

Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263.

(Also listed as Physical Education 24A. Student may enroll in either department, but not both, for credit.)

Two hours lecture-laboratory.

(Any combination of Dance/Physical Education 24A, 24B, and 24C may be taken up to six times for credit as long as the topics are different each time.)

Introduction to the discipline and creative art of social dance. Exposure to basic forms of social dance in a ballroom context. Developing a working vocabulary of traditional social dance movements and an understanding of the cultural and historical contexts that produced the specific dance styles.

**DANC 24B Theory and Technique of Social Dance II 1 Unit**

(See general education pages for the requirement this course meets.)

Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263.

(Also listed as Physical Education 24B. Student may enroll in either department, but not both, for credit.)

Two hours lecture-laboratory.

(Any combination of Dance/Physical Education 24A, 24B, and 24C may be taken up to six times for credit as long as the topics are different each time.)

Introduction to the discipline and creative art of social dance, part two. Exposure to the basic forms of social dance in a ballroom context. Developing a working vocabulary of traditional social dance movements and an understanding of the cultural and historical contexts that produced the specific dance.

**DANC 24C Theory and Technique of Social Dance III 1 Unit**

(See general education pages for the requirement this course meets.)

Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263; Dance/Physical Education 24A or 24B.

(Also listed as Physical Education 24C. Student may enroll in either department, but not both, for credit.)

Two hours lecture-laboratory.

(Any combination of Dance/Physical Education 24A, 24B, and 24C may be taken up to six times for credit as long as the topics are different each time.)

The art of social dance at the advanced level. Expanded exposure to the basic forms of social dance in a ballroom context. Developing a working vocabulary of traditional social dance movements and an understanding of the cultural and historical contexts that produced the specific dance styles.

**DANC 27A Dance Workshop (Student Productions, the De Anza Dancers) 1 Unit****DANC 27B 2 Units****DANC 27C 3 Units****DANC 27D 4 Units**

Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263.

Two hours lecture-laboratory for each unit of credit.

(Any combination of Dance 27A, 27B, 27C, and 27D may be taken up to three times for credit.)

An introduction to the basic techniques of dance production and performance.

**DANC 37A Theory and Technique of Jazz Dance I 1 Unit**

(See general education pages for the requirement this course meets.)

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

(Also listed as Physical Education 37A. Student may enroll in either department, but not both, for credit.)

Two hours lecture-laboratory.

(Any combination of Dance/Physical Education 37A and 37B may be taken up to six times for credit as long as the topics are different each time.)

Introduction to the discipline and creative art of jazz dance. Body conditioning, exposure to the history of major international influences, artists, and works. Development of a working vocabulary; and practice of basic techniques.

**DANC 37B Theory and Technique of Jazz Dance II 2 Units**

(See general education pages for the requirement this course meets.)

Prerequisite: Dance/Physical Education 37A.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

(Also listed as Physical Education 37B. Student may enroll in either department, but not both, for credit.)

Four hours lecture-laboratory.

(Any combination of Dance/Physical Education 37A and 37B may be taken up to six times for credit as long as the topics are different each time.)

Exploring elements of time, space, shape and motion as related to jazz dance. Body conditioning, exposure to major international influences, artists, and works. The development of a working vocabulary in significant jazz dance styles; and practice of intermediate level techniques.

**DANC 38A**      **Appreciation of Dance**      **4 Units**  
 (See general education pages for the requirement this course meets.)  
 Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.  
 Four hours lecture, one additional hour to be arranged.  
 Dance as an art form, including history, traditions and trends, outstanding artists and works, vocabulary, theory, and practice in viewing and understanding dance. Covers ballet, modern, jazz, theatrical, and world dance.

**DANC 49A**      **Topics in Theory and Technique of World Dance**      **1 Unit**  
 (Formerly Dance 50A.)  
 (See general education pages for the requirement this course meets.)  
 Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263.  
 (Also listed as Physical Education 49A. Student may enroll in either department, but not both, for credit.)  
 Two hours lecture-laboratory.

(Any combination of Dance/Physical Education 49A may be taken up to six times, as long as the topics are different each time.)  
 Introduction to the art of world dance. Course will provide exposure to forms of dance from an international perspective. Students will learn to perform the basic skills of classical, traditional, and folk dances from various world cultures, while developing a working vocabulary of traditional dance movements. Students will attempt to gain an understanding and appreciation of the cultural and historical contexts that produced the specific dance forms.

**DANC 78L**      **Special Topics in Dance**      **1/2 Unit**  
**DANC 78M**      **1 Unit**  
**DANC 78N**      **2 Units**  
**DANC 78P**      **3 Units**  
**DANC 78Q**      **4 Units**  
**DANC 78R**      **5 Units**  
**DANC 78S**      **6 Units**  
**DANC 78T**      **7 Units**  
**DANC 78U**      **8 Units**

(Formerly Dance 25L-U.)  
 Advisory: Enrollment by audition only; English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263.  
 (Also listed as Physical Education 78L-U. Student may enroll in either department, but not both, for credit.)  
 Two hours lecture-laboratory for each unit of credit.  
 (Any combination of Dance/Physical Education 78L-U may be taken up to six times, not to exceed 18 units, as long as the topics are different each time.)  
 Projects for groups in special areas of interest relative to but outside of the departmental curriculum.

**DANC 79A**      **Individual Study in Dance**      **1 Unit**  
**DANC 79B**      **2 Units**  
**DANC 79C**      **3 Units**  
**DANC 79D**      **4 Units**  
 (Formerly Dance 26A-D.)  
 Advisory: Submission of Special Projects Contract; English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263.  
 Three hours laboratory for each unit of credit.  
 (Any combination of Dance 79A, 79B, 79C, and 79D may be taken up to six times, not to exceed 18 units, as long as the topics/projects are different each time.)  
 Individual projects in advanced choreography and dance research.

## Drama

(See Dance and/or Theatre Arts.)

## Economics

**ECON 1**      **Principles of Macroeconomics**      **4 Units**  
 (See general education pages for the requirement this course meets.)  
 Advisory: English Writing 1A or English as a Second Language 5.  
 Four hours lecture.  
 An introduction to macroeconomics. Topics covered will include national income accounting, money and the banking system, money and the price level, classical macro theory, Keynesian macro theory, monetary and fiscal policy, and international trade.  
 (CAN ECON 2)

**ECON 2**      **Principles of Microeconomics**      **4 Units**  
 (See general education pages for the requirement this course meets.)  
 Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.  
 Four hours lecture.

Examines fundamental microeconomic issues; the allocation of resources and the pricing of output and factors of production; the distribution of wealth and income; consumer motivations and behavior; the nature and behavior of business firms and markets under various degrees of competition; current problems.  
 (CAN ECON 4)

**ECON 78I**      **Economic Issues in Today's World**      **3 Units**  
**ECON 78J**      **4 Units**  
 (Formerly Economics 40I and 40J.)  
 Advisory: English Writing 1A or English as a Second Language 5; Economics 1 or 2.

Basic economic analysis of current economic issues. Each topic studied is selected according to its currency and relevance to analysis. Examines fundamental economics issues within the context of current socio-political activity within the local or national economic environment. By learning the economic way of thinking, our students develop the ability to analyze complex, often ill-defined problems, and to think strategically about both intended and unintended consequences. The study of Economics develops a student's ability to organize thoughts, analyze complex issues, and to make clear and persuasive recommendations. These skills explain why economics majors score higher on law school admissions tests than other majors, and receive among the highest starting salaries. Recent classes have involved experimental economic techniques and their application to the understanding and testing of theory; the changing European economic community; liberal, conservative and radical perspectives on current economic policy; the restructuring of the California and United States economy; public finance options for local, state and federal government units; the use of simulations and modeling in economic analysis; political economy; and, experimental and behavioral economic theories and practices.

## Education

**EDUC 1**      **Introduction to Elementary Education in a Diverse Society**      **3 Units**  
 (Formerly Education 66.)  
 Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.  
 Two hours lecture, three hours laboratory.

Principles and practices of elementary education. Participation and observation in the elementary classroom setting. Program planning based on observations and self-assessment for the teaching profession will be implemented.

**EDUC 41**      **Class Practices in Middle School Science and Mathematics**      **2 Units**  
 (Formerly Education 61.)  
 Prerequisite: Qualifying score on Mathematics Placement Test within the last calendar year; or Mathematics 114 with a grade of C or better, and a college level science course with a grade of C or better. Current TB test, finger printing, and background check.  
 Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.  
 (Also listed as Physical Sciences, Math, and Engineering 41. Student may enroll in either department, but not both, for credit.)  
 One hour lecture, three hours laboratory.  
 Pass-No Pass (P-NP) course.

Introduction to the teaching and learning of science and mathematics in middle school classrooms for prospective science and mathematics teachers. Pairs of students are placed in local middle school classrooms to observe, participate and assist a Mentor Teacher in science and mathematics instruction. Students also participate in a weekly seminar on campus and discuss the best means to teach appropriate science and mathematics concepts at the middle school level.

**EDUC 46**      **Mathematics for Elementary Education**      **5 Units**  
 (See general education pages for the requirement this course meets.)  
 Prerequisite: Mathematics 114 with a grade of C or better.  
 Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.  
 (Also listed as Mathematics 46. Student may enroll in either department, but not both, for credit.)  
 Five hours lecture.

Designed for prospective elementary and middle school teachers. The class is an introduction to the discipline of mathematics as the use of logical, quantitative, and spatial reasoning in the abstraction, modeling, and problem solving of real-world situations. The main topics in the course include the origins of mathematics, mathematical reasoning and problem solving strategies, theory of sets, integers and integral number theory, rational numbers and proportion, real numbers and decimal notation, and measurement. Throughout the course students will experience the learning of mathematics in a way that models how they can create an active learning environment for their future students.

**EDUC 56 Understanding and Working with English Language Learners 3 Units**

(Also listed as *Child Development 56*. Student may enroll in either department, but not both, for credit.)

Three hours lecture.

Developmental and cultural examination of the bilingual child in early childhood programs. Theories and developmental sequence of bilingual language acquisition. Role of teacher and methods for supporting the bilingual child.

**EDUC 58 Children's Literature 4 Units**

(See general education pages for the requirement this course meets.)

Advisory: *English Writing 211 and Reading 211 (or Language Arts 211)*, or *English as a Second Language 272 and 273*.

(Also listed as *English Literature 58*. Student may enroll in either department, but not both, for credit.)

Four hours lecture.

Study of the literature of children (pre-elementary through young adult) with an emphasis on poetry, folk tales, myths, fiction, fantasy, and nonfiction from a variety of cultures, ethnicities and historical periods. Evaluation of the literary quality and the cultural and historical meaning of individual works. Study of the use of children's literature as an educational tool both in the classroom and outside of it.

**EDUC 73 Early Childhood Mental Health 3 Units**

Advisory: *English Writing 211 and Reading 211 (or Language Arts 211)*, or *English as a Second Language 272 and 273*.

(Also listed as *Child Development 73*. Student may enroll in either department, but not both, for credit.)

Three hours lecture.

Examination of child development and mental health theory. Assessment and screening to identify childhood mental health challenges. Implementation of mental health interventions and strategies. Exploration of violence's impact on the physical and psychological well-being of adults and children.

**EDUC 74 Early Childhood Mental Health Seminar and Fieldwork 3 Units**

Advisory: *English Writing 211 and Reading 211 (or Language Arts 211)*, or *English as a Second Language 272 and 273*.

(Also listed as *Child Development 74*. Student may enroll in either department, but not both, for credit.)

Two hours lecture, three hours laboratory.

Provides an overview of different approaches to early intervention with children and their families and will help students develop basic support skills for use in dealing with high risk families, including those with exceptional emotional, social or physical needs.

## Electronics

(This is a district program taught at Foothill College.)

## Engineering

**ENGR 2 The Engineering Profession 2 Units**

Prerequisite: *Mathematics 212* or equivalent.

Two hours lecture.

A real-world introduction to the study and practice of engineering as a profession; requirements; responsibilities; opportunities; branches of engineering; registration, educational preparation, and the impact engineers have had on our world.

**ENGR 10 Introduction to Engineering 4 Units**

Advisory: *English Writing 211 and Reading 211 (or Language Arts 211)*, or *English as a Second Language 272 and 273; Mathematics 212* or equivalent.

Two hours lecture, six hours laboratory.

An introduction to engineering design through a variety of projects, including experimentation, data analysis, and development of computer skills. Exposure to several engineering disciplines through problem solving for the purpose of providing information to assist students in a choice of major.

**ENGR 35 Statics 4 Units**

Prerequisite: *Engineering 10; Mathematics 1B; Physics 4A*.

Three hours lecture, three hours laboratory.

Principles of statics as applied to particles and rigid bodies in two and three dimensions. Vector solutions for concentrated and distributed loads. Determination of centroids and moments of inertia and the effects of dry friction. Programming computer solutions.

(CAN ENGR 8)

**ENGR 37 Introduction to Circuit Analysis 5 Units**

Prerequisite: *Physics 4C (may be taken concurrently); and Mathematics 1D* or equivalent.

Five hours lecture.

Introduction to the analysis of lumped, linear, bilateral circuits. Basic equations, elementary network differential equations; natural and forced response of simple circuits. Development of steady state sinusoidal circuit analysis for the network differential equations.

(CAN ENGR 12)

**ENGR 45 Properties of Materials 4 Units**

Prerequisite: *Engineering 10; Chemistry 1B; Physics 4B; and English Writing 211 and Reading 211 (or Language Arts 211)*, or *English as a Second Language 272 and 273*.

Three hours lecture, three hours laboratory.

Properties of engineering materials as related to internal structures; modification and control of structure; environmental considerations; selection criteria for applications. Programming computer solutions.

(CAN ENGR 4)

**ENGR 57 Engineering Drawing 4 Units**

Prerequisite: *Mathematics 114* or equivalent.

Two hours lecture, six hours laboratory.

Graphics communications using drawings created by instruments, a computer and by sketching. Topics will include lettering, geometric construction, scales, and principles of orthographic projection, sectional views, dimensioning, isometric and oblique pictorials, primary auxiliary views and specialized computer techniques.

**ENGR 77 Special Projects in Engineering 1 Unit****ENGR 77X 2 Units****ENGR 77Y 3 Units**

(Formerly *Engineering 40, 40X, and 40Y*.)

Prerequisite: *Consent of the instructor and division dean*.

Three hours laboratory for each unit of credit.

(Any combination of *Engineering 77, 77X, and 77Y* may be taken up to six times, not to exceed 18 units, as long as the topics/projects are different each time.)

Individual special reading, writing, or study projects in Engineering as determined in consultation with the instructor.

## English

For courses in reading, vocabulary, and spelling, see "Reading." Placement in English is based on results of standardized tests prior to enrollment. To enroll in *English Writing 1A*, a student must demonstrate competence in reading and writing skills.

Competence in reading is demonstrated by a satisfactory score on a standard test (see schedule of classes for details) or satisfactory completion of *Reading 211*, including instructor's recommendation.

Competence in writing is demonstrated by a satisfactory score on a standard test (see schedule of classes for details) or satisfactory completion of *English Writing 211*, including instructor's recommendation.

Students scoring below the qualifying score for *Reading 211* in the reading test should enroll in *Reading 200*. Those scoring below the qualifying score for *English Writing 211* on the writing test should enroll in *English Writing 200*.

## English/Literature

Some courses in this department have recommended competencies. These are determined by placement tests; students who have not taken placement tests or who are unsure of their scores should contact the Assessment Office.

**ELIT 1 Introduction to Film 4 Units**

(See general education pages for the requirement this course meets.)

Advisory: *English Writing 211 and Reading 211 (or Language Arts 211)*, or *English as a Second Language 272 and 273*.

(Also listed as *Film/Television 1*. Student may enroll in either department, but not both, for credit.)

Four hours lecture.

An introduction to the international art of cinema through the techniques and procedures of filmmaking, including screenwriting, cinematography, directing, editing, and sound; through the formal properties of film, such as mise-en-scene, structure, and style; through the relationships between film and society, and through the critical analysis of works of film art.

**ELIT 3 Film Genres 4 Units**

Advisory: *English Writing 1A* or *English as a Second Language 5*.

(Also listed as *Film/Television 41*. Student may enroll in either department, but not both, for credit.)

Four hours lecture.

(Any combination of *English Literature 3* and *Film/Television 41* may be taken up to three times for credit as long as the topic matter is different each time.)

Analysis of specific film genres such as action-adventure, comedy, film noir, gangster, horror, musical, science fiction, thriller, war film or western within global, historical, social, cultural, industrial and aesthetic contexts. The genre studied changes each quarter (see subtitle in quarterly class schedule).

<p><b>ELIT 4 National Cinemas 4 Units</b>  <i>Advisory: English Writing 1A or English as a Second Language 5.</i>  <i>(Also listed as Film/Television 42. Student may enroll in either department, but not both, for credit.)</i>  <i>Four hours lecture.</i>  <i>(Any combination of English Literature 4 and Film/Television 42 may be taken up to three times for credit as long as the topic matter is different each time.)</i>            Analysis of selected national cinemas in terms of major periods, themes and formal parameters, and in relation to both national and international cultural histories. The national cinema studied changes each quarter (see subtitle in quarterly class schedule).</p>	<p><b>ELIT 17 Introduction to Shakespeare 4 Units</b>  <i>(See general education pages for the requirement this course meets.)</i>  <i>Advisory: English Writing 1A or English as a Second Language 5.</i>  <i>Four hours lecture.</i>            Analysis of representative Shakespearean sonnets, histories, tragedies, and comedies, placed within the literary and social context of the Renaissance.</p>
<p><b>ELIT 5 Film Artists 4 Units</b>  <i>Advisory: English Writing 1A or English as a Second Language 5.</i>  <i>(Also listed as Film/Television 43. Student may enroll in either department, but not both, for credit.)</i>  <i>Four hours lecture.</i>  <i>(Any combination of English Literature 5 and Film/Television 43 may be taken up to three times for credit as long as the topic matter is different each time.)</i>            Analysis of the works of specific film artists, such as directors, Alfred Hitchcock or Orson Welles; or analysis of the works of artists practicing a specific film craft, such as screenwriting, acting, cinematography or editing. The topic studied changes each quarter (see subtitle in quarterly class schedule).</p>	<p><b>ELIT 19 Introduction to the Bible as Literature 4 Units</b>  <i>Prerequisite: English Writing 1A or English as a Second Language 5.</i>  <i>Four hours lecture.</i>            An introduction to the study of the Bible in English as an anthology of literary types, with considerations of its history and influence on our culture. Selected reading of Old and New Testaments and Apocrypha.</p>
<p><b>ELIT 6 Cinema and the African American (An Historical Analysis of African Americans in American Cinema) 4 Units</b>  <i>(See general education pages for the requirement this course meets.)</i>  <i>Advisory: English Writing 1A or English as a Second Language 5.</i>  <i>(Also listed as Intercultural Studies 14 and Film/Television 48. Student may enroll in only one department, for credit.)</i>  <i>Four hours lecture, one additional hour to be arranged.</i>            A survey of the image and role of the American film industry in the United States. Particular attention will be given to the development of images of racial stereotypes, those works attempting an historical portrayal of the African American experience and the roles played by key African Americans in the evolution of film as an art and North American feature films as an industry.</p>	<p><b>ELIT 20 Major Authors 4 Units</b>  <i>(See general education pages for the requirement this course meets.)</i>  <i>Prerequisite: English Writing 1A.</i>  <i>Four hours lecture.</i>  <i>(May be taken two times for credit as long as the subject matter is different each time.)</i>            Reading and analysis of representative works of one, two, or three major authors through lecture, discussion, and critical writing. Emphasis on author or author's stylistic innovations, historical, social, cultural, multicultural, and gender representations.</p>
<p><b>ELIT 10 Introduction to Fiction 4 Units</b>  <i>(See general education pages for the requirement this course meets.)</i>  <i>Advisory: English Writing 1A or English as a Second Language 5.</i>  <i>Four hours lecture.</i>            Intensive study of fiction; reading, discussion, and analysis of structure and meaning in selected novels and short stories.</p>	<p><b>ELIT 21 Women in Literature 4 Units</b>  <i>(See general education pages for the requirement this course meets.)</i>  <i>Advisory: English Writing 1A or English as a Second Language 5.</i>  <i>(Also listed as Women's Studies 21. Student may enroll in either department, but not both, for credit.)</i>  <i>Four hours lecture.</i>            Intensive study of representative literary works by or about women including an analysis of different historical, cultural, and critical perspectives.</p>
<p><b>ELIT 11 Introduction to Poetry 4 Units</b>  <i>(See general education pages for the requirement this course meets.)</i>  <i>Advisory: English Writing 1A or English as a Second Language 5.</i>  <i>Four hours lecture.</i>            Intensive study of poetry; reading, discussion, and analysis of structure and meaning in selected poems.</p>	<p><b>ELIT 22 Mythology and Folklore 4 Units</b>  <i>(See general education pages for the requirement this course meets.)</i>  <i>Advisory: English Writing 1A or English as a Second Language 5.</i>  <i>Four hours lecture.</i>            An intercultural survey of prehistoric, historic and contemporary world mythology and folklore which examines the relationship between a culture's myths and folk tales and its art, literature, aesthetics and social values.</p>
<p><b>ELIT 12 Introduction to Dramatic Literature 4 Units</b>  <i>(Formerly English Literature 52.)</i>  <i>(See general education pages for the requirement this course meets.)</i>  <i>Advisory: English Writing 1A or English as a Second Language 5.</i>  <i>Four hours lecture.</i>            Intensive study of dramatic literature; reading, discussion, and analysis of structure and meaning in selected plays.</p>	<p><b>ELIT 23 Literature and Masculinities 4 Units</b>  <i>(Formerly English Literature 63.)</i>  <i>(See general education pages for the requirement this course meets.)</i>  <i>Advisory: English Writing 1A or English as a Second Language 5.</i>  <i>(Also listed as Women's Studies 23. Student may enroll in either department, but not both, for credit.)</i>  <i>Four hours lecture.</i>            Intensive study of representative literary works that highlight the role of men as writers, characters, subjects and readers, with attention to the relevant historical and cultural contexts of diverse masculinities.</p>
<p><b>ELIT 15A A Literary and Historical Study of the Old Testament 4 Units</b>  <i>(See general education pages for the requirement this course meets.)</i>  <i>Prerequisite: English Writing 1A or English as a Second Language 5.</i>  <i>(Also listed as History 15A. Student may enroll in either department, but not both, for credit.)</i>  <i>Four hours lecture.</i>            Critical examination of the Old Testament (Hebrew Bible) and related writings, from a literary and historical point of view, with particular attention given to recent biblical scholarship.</p>	<p><b>ELIT 24 Asian American Literature 4 Units</b>  <i>(Formerly English Literature 52.)</i>  <i>(See general education pages for the requirement this course meets.)</i>  <i>Prerequisite: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.</i>  <i>(Also listed as Intercultural Studies 24. Student may enroll in either department, but not both, for credit.)</i>  <i>Four hours lecture.</i>            Introduction to Asian American literature. Readings in Twentieth and Twenty-first Century works, with an emphasis on three relevant themes: problems of identity as it relates to class, gender, mixed heritage, and sexuality; politics and the history of Asian American activism and resistance; and diversity of cultures within the Asian American community.</p>
<p><b>ELIT 15B A Literary and Historical Study of the New Testament 4 Units</b>  <i>(See general education pages for the requirement this course meets.)</i>  <i>Prerequisite: English Writing 1A or English as a Second Language 5.</i>  <i>(Also listed as History 15B. Student may enroll in either department, but not both, for credit.)</i>  <i>Four hours lecture.</i>            Critical examination of the New Testament and related writings, from a literary and historical point of view, with particular attention given to recent biblical scholarship.</p>	<p><b>ELIT 25 Introduction to Linguistics 4 Units</b>  <i>(See general education pages for the requirement this course meets.)</i>  <i>Advisory: English Writing 1A or English as a Second Language 5.</i>  <i>(Also listed as Linguistics 1. Student may enroll in either department, but not both, for credit.)</i>  <i>Four hours lecture.</i>            Introduction to the nature of language. Origin and development of spoken and written languages, how people learn languages, and how languages change, with emphasis on the history of English. Basics of linguistic description including systems of phonetics and phonology, semantics, morphology and syntax. Study of general linguistic principles as they apply across languages.</p>
	<p><b>ELIT 26 Popular Literature 4 Units</b>  <i>(See general education pages for the requirement this course meets.)</i>  <i>Advisory: English Writing 1A or English as a Second Language 5.</i>  <i>Four hours lecture.</i>            Intensive study of popular writing, especially popular fiction, from a social, historical, and literary perspective. Includes examination of oppositions such as popular/literary, high/low culture, entertainment/art.</p>

- ELIT 39 Contemporary Literature 4 Units**  
(See general education pages for the requirement this course meets.)  
Advisory: English Writing 1A or English as a Second Language 5.  
Four hours lecture.  
An intercultural survey of contemporary literary forms and practices, with emphasis on works by Post-WWII authors.
- ELIT 44 International Literature (Fiction) 4 Units**  
(See general education pages for the requirement this course meets.)  
Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.  
Four hours lecture.  
Reading and critical analysis of representative works of international fiction, including works from Africa, Asia, Latin America, Pacific Islands, and Australia. Literary, cultural, and cross-cultural interpretation, evaluation, and comparison. Cross-cultural interpretation and literary analysis of short stories and novels.
- ELIT 46A Major British Writers (Medieval and Renaissance) 4 Units**  
(See general education pages for the requirement this course meets.)  
Advisory: English Writing 1A or English as a Second Language 5.  
Four hours lecture.  
Reading and critical analysis of representative works by major writers such as Chaucer, Shakespeare and Milton.  
(CAN ENGL 7) (ELIT 46A + 46B + 46C = CAN ENGL SEQ B)
- ELIT 46B Major British Writers (Neo-Classical and Romantic) 4 Units**  
(See general education pages for the requirement this course meets.)  
Advisory: English Writing 1A or English as a Second Language 5, or consent of the instructor.  
Four hours lecture.  
Reading and critical response to representative works by major writers such as Pope, Behn, Swift, Johnson, Wordsworth, Coleridge, Percy and Mary Godwin Shelley, Keats, Austen, Montagu, and the Bronte sisters.  
(ELIT 46A + 46B + 46C = CAN ENGL SEQ B)
- ELIT 46C Major British Writers (Victorian and Modern) 4 Units**  
(See general education pages for the requirement this course meets.)  
Advisory: English Writing 1A or English as a Second Language 5.  
Four hours lecture.  
Reading and critical analysis of representative works by major writers such as The Brontes, Tennyson, Barrett Browning, Browning, Dickens, Arnold, Hopkins, Wilde, Lawrence, Hardy, Yeats, Conrad, Joyce, Eliot, Beckett, Woolf, and Auden.  
(CAN ENGL 11) (ELIT 46A + 46B + 46C = CAN ENGL SEQ B)
- ELIT 48A Major American Writers (Colonial and Romantic, 1620-1855) 4 Units**  
(See general education pages for the requirement this course meets.)  
Advisory: English Writing 1A or English as a Second Language 5.  
Four hours lecture.  
Reading and critical analysis of representative works by diverse writers such as William Bradford, Anne Bradstreet, Jonathan Edwards, Ben Franklin, Thomas Jefferson, James Fenimore Cooper, Edgar Allan Poe, Nathaniel Hawthorne, Herman Melville, Frederick Douglass, Harriet Jacobs, Harriet Beecher Stowe, Elias Boudinot, Chief Seattle, Sojourner Truth, Ralph Waldo Emerson, Margaret Fuller, Henry David Thoreau, Walt Whitman, and Emily Dickinson.  
(ELIT 48A + 48B + 48C = CAN ENGL SEQ C)
- ELIT 48B Major American Writers (the Advent of Realism, 1855-1920) 4 Units**  
(See general education pages for the requirement this course meets.)  
Advisory: English Writing 1A or English as a Second Language 5.  
Four hours lecture.  
Reading and critical analysis of representative works by major writers such as Mark Twain, Henry James, William Dean Howells, Charlotte Perkins Gilman, Mary Wilkins Freeman, Kate Chopin, Stephen Crane, Booker T. Washington, W.E.B. DuBois, Black Elk, and Robert Frost.  
(ELIT 48A + 48B + 48C = CAN ENGL SEQ C)
- ELIT 48C Major American Writers (the Modern Age, 1914-the Present) 4 Units**  
(See general education pages for the requirement this course meets.)  
Advisory: English Writing 1A or English as a Second Language 5.  
Four hours lecture.  
Reading and critical analysis of representative works by major writers such as Faulkner, Hemingway, Hurston, Morrison, Fitzgerald, Hughes, Wright, Ellison, Williams, Cisneros, Stevens, Sexton, Eliot, Vonnegut, Pynchon, O'Connor, Plath, and O'Neill.  
(ELIT 48A + 48B + 48C = CAN ENGL SEQ C)
- ELIT 58 Children's Literature 4 Units**  
(See general education pages for the requirement this course meets.)  
Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

- (Also listed as Education 58. Student may enroll in either department, but not both, for credit.)  
Four hours lecture.  
Study of the literature of children (pre-elementary through young adult) with an emphasis on poetry, folk tales, myths, fiction, fantasy, and nonfiction from a variety of cultures, ethnicities and historical periods. Evaluation of the literary quality and the cultural and historical meaning of individual works. Study of the use of children's literature as an educational tool both in the classroom and outside of it.
- ELIT 65 Literature and Film 4 Units**  
(See general education pages for the requirement this course meets.)  
Advisory: English Writing 1A or English as a Second Language 5.  
Four hours lecture.  
Comparative study of literature and film from formal, historical, social, cultural, and other perspectives, with particular emphasis on interconnections, reciprocal influences, and cinematic adaptations of literary works.
- ELIT 78 Special Topics in Literature 1 Unit**  
**ELIT 78X 2 Units**  
**ELIT 78Y 3 Units**  
**ELIT 78Z 4 Units**  
(Formerly English Literature 30, 30X, 30Y, and 30Z.)  
Prerequisite: English Writing 1A or English as a Second Language, or recommendation of instructor or counselor.  
One hour lecture for each unit of credit.  
(Any combination of English Literature 78, 78X, 78Y, and 78Z may be taken up to six times, not to exceed 18 units, as long as the topics/projects are different each time.)  
Intensive study and analysis of special topic in language or literature. Subjects vary.
- ELIT 97 Special Topics: Shakespeare in Performance 2 Units**  
Advisory: English Writing 1A or English as a Second Language 5.  
One hour lecture, three hours laboratory.  
(May be taken six times for credit - plays and content change each time.)  
Lectures and discussions of selected plays and an extended field trip to live performances of the plays at the annual Oregon Shakespeare Festival. Costs to be borne by the student.

## English/Writing

Some courses in this department have recommended competencies. These are determined by placement tests; students who have not taken placement tests or who are unsure of their scores should contact the Assessment Office.

- EWRT 1A Composition and Reading 5 Units**  
(See general education pages for the requirement this course meets.)  
Prerequisite: English Writing 211 and Reading 211; or Language Arts 211; or equivalent placement (normally based on results of English Placement Tests).  
Five hours lecture, one additional hour to be arranged working in Cross Cultural Partners and/or use of the English Writing Laboratory and/or working in the Writing and Reading Center and/or civic engagement and/or community service.  
Introduction to university level reading and writing, with an emphasis on analysis. Close examination of a variety of texts (personal, popular, literary, professional, academic) from culturally diverse traditions. Practice in common rhetorical strategies used in academic writing. Composition of clear, well-organized, and well-developed essays, with varying purposes and differing audiences, from personal to academic.  
(CAN ENGL 2)
- EWRT 1B Reading, Writing, and Research 5 Units**  
(See general education pages for the requirement this course meets.)  
Prerequisite: English Writing 1A.  
Five hours lecture, one additional hour to be arranged working in Cross Cultural Partners and/or use of the English Writing Laboratory and/or working in the Writing and Reading Center and/or civic engagement and/or community service.  
Development of analytical, integrative skills in reading and writing. Academic (interpretive, analytical, argumentative) writing based largely on reading of literary/imaginative texts linked by a common theme or issue. Outside research leading to analysis, comparison, and synthesis in a documented research paper.  
(CAN ENGL 4)
- EWRT 1C Literature and Composition 5 Units**  
(See general education pages for the requirement this course meets.)  
Prerequisite: English Writing 1B.  
Five hours lecture, one additional hour to be arranged working in Cross Cultural Partners and/or use of the English Writing Laboratory and/or working in the Writing and Reading Center and/or civic engagement and/or community service.  
Applies the analytical, critical, and synthesis skills developed in English Writing 1A and 1B to the introductory study to the ways meaning can be made in diverse cultural, social, and historical contexts in prose, poetry, and drama by reading and analyzing texts and critical interpretations and by composing critical responses, analyses, and arguments.

**EWRT 2 Critical Reading, Writing, and Thinking 5 Units**

(See general education pages for the requirement this course meets.)

Prerequisite: English Writing 1A.

Five hours lecture, one additional hour to be arranged working in Cross Cultural Partners and/or use of the English Writing Laboratory and/or working in the Writing and Reading Center and/or civic engagement and/or community service. Development of critical thinking skills and application of these skills to reading and writing. Academic (analytical, argumentative) writing based on reading of complex texts. Outside research leading to analysis, comparison, and synthesis in a documented research paper.

**EWRT 30 Introduction to Creative Writing 4 Units**

(Formerly English Writing 52.)

(See general education pages for the requirement this course meets.)

Prerequisite: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; plus corequisite lab classes in each case; or equivalent placement into English Writing 1A.

Four hours lecture, one additional hour to be arranged working in Cross Cultural Partners and/or use of the English Writing Laboratory and/or working in the Writing and Reading Center and/or civic engagement and/or community service. Introduction to the writing of fiction, poetry, drama, and creative nonfiction, through both critical analysis and intensive practice.

**EWRT 40 Fiction Writing 4 Units**

Prerequisite: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Advisory: English Writing 30.

Four hours lecture, one additional hour to be arranged working in Cross Cultural Partners and/or use of the English Writing Laboratory and/or working in the Writing and Reading Center and/or civic engagement and/or community service. Pass-No Pass (P-NP) course.

Development of fiction writing skills through critical analysis and intensive practice.

**EWRT 41 Poetry Writing 4 Units**

Prerequisite: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Advisory: English Writing 30.

Four hours lecture, one additional hour to be arranged working in Cross Cultural Partners and/or use of the English Writing Laboratory and/or working in the Writing and Reading Center and/or civic engagement and/or community service. Pass-No Pass (P-NP) course.

Development of poetry writing skills through critical analysis and intensive practice.

**EWRT 42 Writing It Real: Creative Nonfiction and Memoir Writing 4 Units**

(Formerly English Writing 54.)

Prerequisite: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Four hours lecture.

Development of skills in writing creative nonfiction and memoir through critical analysis and intensive practice.

**EWRT 50 Creative Writing Workshop 4 Units**

Prerequisite: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Advisory: English Writing 30, 40, or 41.

Four hours lecture.

Further development of creative writing skills through careful analysis, intensive practice, and collaborative critique.

**EWRT 56 Special Projects in English 1 Unit****EWRT 56X 2 Units****EWRT 56Y 3 Units**

Prerequisite: Consent of instructor and division dean.

Three hours laboratory for each unit of credit.

(Any combination of English Writing 56, 56X, and 56Y may be taken up to six times, not to exceed 18 units, as long as the topics/projects are different each time.)

Pass-No Pass (P-NP) course.

Special reading, writing, or study projects in English as determined in consultation with the instructor.

**EWRT 61 Introduction to Technical Writing 5 Units**

Prerequisite: English Writing 1A or English as a Second Language 5.

(Also listed as Business 61 and Technical Writing 61. Student may enroll in only one department for credit.)

Five hours lecture.

Technical writing skills focusing on basic techniques of exposition for the technical field, functional description, process writing, technical vocabulary, correct usage, and accurate editing.

**EWRT 62 Survey of Technical Writing 5 Units**

Prerequisite: Business/English Writing/Technical Writing 61 (may be taken concurrently).

(Also listed as Business 62 and Technical Writing 62. Student may enroll in only one department for credit.)

Five hours lecture.

Technical writing skills focusing on short document formats, production of sections of various technical documents, and incorporation of graphics within text.

**EWRT 63 Technical Publications 5 Units**

Prerequisite: Business/English Writing/Technical Writing 61.

(Also listed as Business 63 and Technical Writing 63. Student may enroll in only one department for credit.)

Five hours lecture.

Technical writing and editing skills applied through individual and group assignments with emphasis on planning, scheduling, and producing longer reports, manuals, and instructions. Development of organizational skills and individual documentation solutions.

**EWRT 64 Technical Writing Seminar 5 Units**

Prerequisite: Business/English Writing/Technical Writing 62 or 63.

(Also listed as Business 64 and Technical Writing 64. Student may enroll in only one department for credit.)

Five hours lecture.

Technical communication and editing skills applied through the preparation and presentation of a complete document according to the standards of the student's chosen technical field.

**EWRT 65 Literary Magazine 1 Unit****EWRT 65X 2 Units**

Advisory: English Writing 1A or English as a Second Language 5.

Two hours lecture-laboratory for the one-unit course; two hours lecture-laboratory and three hours laboratory for the two unit course; one additional hour to be arranged for each section working in Cross Cultural Partners and/or use of the English Writing Laboratory and/or working in the Writing and Reading Center and/or civic engagement and/or community service.

(Any combination of English Writing 65 and 65X may be taken up to six times.

Submissions vary each quarter, so content is different. Students build upon previous experience and develop higher-level skills.)

Pass-No Pass (P-NP) course.

Collaborative evaluation and selection of fiction, poetry, photography, drawings, and other literary and artistic work for literary magazine. Magazine design and production. (Additional editorial, production, management, or marketing work for English Writing 65X.)

**EWRT 66W Special Topics in Technical Communications 1 Unit****EWRT 66X 2 Units****EWRT 66Y 3 Units****EWRT 66Z 4 Units**

Advisory: English Writing 61 and 62.

Two hours lecture-laboratory for each unit of credit, one additional hour to be arranged working in Cross Cultural Partners and/or use of the English Writing Laboratory and/or working in the Writing and Reading Center and/or civic engagement and/or community service.

(Any combination of English Writing 66W, X, Y, and Z may be taken for a maximum of eight units as long as the topic is different each time.)

Intensive study and analysis of a special topic in Technical Communications. Subjects vary.

**EWRT 97 Introduction to Peer Tutoring in Writing 3 Units**

Advisory: English Writing 1A or English as a Second Language 5.

(Also listed as Learning Assistance 97. Student may enroll in either department, but not both, for credit.)

Three hours lecture.

Required training for De Anza writing tutors. Introduction to the theory and practice of tutoring writing, including strategies and approaches to help students from diverse linguistic backgrounds at various stages of the writing process. Students read about, observe, discuss, write about and practice the craft of tutoring writing. After an initial orientation, students in the class begin tutoring, and reflect on their tutoring experiences as part of the class.

**EWRT 161 Guided Practice in Preparatory Writing Skills 1/2 Unit**

Prerequisite: Qualifying score on the English Placement Test or successful completion of English Writing 200 and 201, or Language Arts 200.

Corequisite: English Writing 161 students must also enroll in English Writing 211 or Language Arts 211.

One hour lecture-laboratory, one additional hour to be arranged working in Cross Cultural Partners and/or use of the English Writing Laboratory and/or working in the Writing and Reading Center and/or civic engagement and/or community service.

Pass-No Pass (P-NP) course.

Intensive review of English grammar and development of self-editing skills necessary for college-level writing.

**EWRT 162 Guided Practice in Preparatory Writing 1/2 Unit**

*Prerequisite:* Qualifying score on the English Placement Test; or English Writing 200; or Language Arts 200.

*Corequisite:* English Writing 162 students must also enroll in English Writing 211. One hour lecture-laboratory, one additional hour to be arranged working in Cross Cultural Partners and/or use of the English Writing Laboratory and/or working in the Writing and Reading Center and/or civic engagement and/or community service.

(May be taken two times for credit.)

Pass-No Pass (P-NP) course.

Intensive review of American English clause structure and development of self-editing skills for avoiding and correcting errors with sentence fragments, comma splices, and run-together sentences.

**EWRT 190X Grammar and Writing Lab 1/2 Unit**  
**EWRT 190Y 1 Unit**

One and one-half hours laboratory for the one-half unit course; three hours laboratory for the one unit course.

(Any combination of English Writing 190X and 190Y may be taken up to six times for credit.)

Pass-No Pass (P-NP) course.

Development of sentence, paragraph, and essay level writing skills with an emphasis on generating material, revising, and self-correcting through one-on-one conferencing, independent work and workshop participation facilitated by Writing Resource Center. Whereas Skills courses are individualized modules in which the students main work is done independently with ancillary materials, in English Writing 190, students will work regularly with qualified staff on a combination of student's own work as well as supplemental materials provided by the Writing Resource Center.

**EWRT 200 Fundamentals of Writing 5 Units**

(Formerly English Writing 200A.)

*Credit course - Does not apply to De Anza Associate degree.*

*Prerequisite:* Qualifying score on the English Placement Test.

*Corequisite:* English Writing 200 students must also enroll in English Writing 201. Five hours lecture.

(May be taken two times for credit.)

Pass-No Pass (P-NP) course.

Practice focused, purposeful writing in several formats to different audiences with a variety of sentence structures responding to, engaging with or inspired by written or visual texts. Edit writing to correct errors in the major conventions of Standard Written English.

**EWRT 201 Guided Practice in Writing 1/2 Unit**

(Formerly English Writing 150.)

*Credit course - Does not apply to De Anza Associate degree.*

*Prerequisite:* Qualifying score on English Placement Test.

*Corequisite:* English Writing 201 students must also enroll in English Writing 200.

One hour lecture-laboratory, one additional hour to be arranged working in Cross Cultural Partners and/or use of the English Writing Laboratory and/or working in the Writing and Reading Center and/or civic engagement and/or community service.

Pass-No Pass (P-NP) course.

Development of reading and writing abilities to produce short essays, focused on a central idea, developed with specific examples and organized according to a clear progression of ideas.

**EWRT 211 Preparatory Reading and Writing Skills 5 Units**

(Formerly English Writing 100.)

*Credit course - Does not apply to De Anza Associate degree.*

*Prerequisite:* English Writing 200 and Reading 200 (or Language Arts 200); or an English Placement Test score of 41 or above.

*Corequisite:* English Writing 211 students must also enroll in English Writing 161 or 212.

Five hours lecture, one additional hour to be arranged working in Cross Cultural Partners and/or use of the English Writing Laboratory and/or working in the Writing and Reading Center and/or civic engagement and/or community service.

Pass-No Pass (P-NP) course.

Develop the abilities necessary for college-level reading and essay writing. Emphasize writing in response to critical questions about assigned texts.

**EWRT 212 Guided Practice in Preparatory Reading and Writing 1/2 Unit**

(Formerly English Writing 101.)

*Credit course - Does not apply to De Anza Associate degree.*

*Prerequisite:* Qualifying score on English Placement Test or successful completion of English Writing 200 and English Writing 201, or Language Arts 200.

*Corequisite:* English Writing 212 students must also enroll in English Writing 211 or Language Arts 211.

One hour lecture-laboratory, one additional hour to be arranged working in Cross Cultural Partners and/or use of the English Writing Laboratory and/or working in the Writing and Reading Center and/or civic engagement and/or community service.

Pass-No Pass (P-NP) course.

Development of writing and reading abilities necessary for college-level essay writing. Emphasis is on writing analytical responses to nonfiction articles.

**EWRT 274 Grammar and Proofreading for Academic Writing 4 Units**

(Formerly English Writing 174.)

*Credit course - Does not apply to De Anza Associate degree.*

(Recommended for students whose native language is not English and students who wish to improve their grammar and proofreading skills.)

*Prerequisite:* English as a Second Language 261, 262, 263; English Writing 200.

(Also listed as English as a Second Language 274. Student may enroll in either department, but not both, for credit.)

Four hours lecture.

Focus on helping students become successful academic writers by addressing their needs (a) to understand grammatical structures fundamental to college writing and (b) to develop effective proofreading skills.

**English as a Second Language**

Students are required to take the De Anza College ESL Placement Test before enrolling in ESL classes. Students who need information about the placement test should look in the *Schedule of Classes* in the section on "Testing" or call the Assessment Center at 408.864.8717.

**ESL 5 Advanced Composition and Reading 5 Units**

(See general education pages for the requirement this course meets.)

*Prerequisite:* English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273, and English as a Second Language 226; or a qualifying score on the English as a Second Language placement test.

Five hours lecture, one additional hour to be arranged working in Cross Cultural Partners and/or use of the English as a Second Language Laboratory and/or use of the Listening and Speaking Laboratory and/or work in the Writing and Reading Center and/or civic engagement and/or community service.

Practice of the techniques of expository and argumentative writing based on personal experience, critical reading, and critical thinking.

**ESL 6 Critical Reading and Research for Writing 5 Units**

(Restricted to students whose native language is not English.)

(See general education pages for the requirement this course meets.)

*Prerequisite:* English Writing 1A or English as a Second Language 5.

Five hours lecture, one additional hour to be arranged working in Cross Cultural Partners and/or use of the English as a Second Language Laboratory and/or use of the Listening and Speaking Laboratory and/or work in the Writing and Reading Center and/or civic engagement and/or community service.

Application of critical thinking and research skills to reading and writing. Academic writing and speaking based largely on analytic and interpretive reading of culturally diverse texts including literature. Outside research leading to analysis, comparison, and synthesis in a documented research paper.

**ESL 210 Practice in Speaking and Conversation 1/2 Unit**

(Formerly English as a Second Language 110.)

*Credit course - Does not apply to De Anza Associate degree.*

(Restricted to students whose native language is not English.)

*Prerequisite:* English as a Second Language 244.

One hour lecture-laboratory.

(May be repeated once for credit.)

Pass-No Pass (P-NP) course.

English speaking and conversation skills practiced in a variety of contexts to develop vocabulary, comprehensibility, and cultural awareness.

**ESL 211 Listening in Context 1/2 Unit**

(Formerly English as a Second Language 111.)

*Credit course - Does not apply to De Anza Associate degree.*

(Restricted to students whose native language is not English.)

*Prerequisite:* English as a Second Language 251.

One hour lecture-laboratory.

Pass-No Pass (P-NP) course.

English listening practice in a variety of contexts to expand vocabulary, comprehensibility and cultural awareness.

**ESL 213 Vocabulary and Idioms in Context 1/2 Unit**

(Formerly English as a Second Language 113.)

*Credit course - Does not apply to De Anza Associate degree.*

(Restricted to students whose native language is not English.)

*Prerequisite:* English as a Second Language 244.

One hour lecture-laboratory.

(May be repeated once for credit.)

Pass-No Pass (P-NP) course.

Vocabulary expansion: reading and listening exposure to vocabulary and idioms in a variety of contexts with follow-up spoken and written practice.

<b>ESL 214</b>	<b>English for Academic Skills</b> (Formerly English as a Second Language 114.) Credit course - Does not apply to De Anza Associate degree. (Restricted to students whose native language is not English.) Prerequisite: English as a Second Language 261, 262 and 263. One hour lecture-laboratory. (May be repeated once for credit.) Pass-No Pass (P-NP) course. Academic skills with emphasis on improving skills in reading, writing and aurally comprehending academic English to prepare students for college-level general education courses.	<b>1/2 Unit</b>	<b>ESL 234</b>	<b>Low Intermediate English as a Second Language</b> (Formerly English as a Second Language 134.) Credit course - Does not apply to De Anza Associate degree. (Restricted to students whose native language is not English.) Prerequisite: Qualifying score on the English as a Second Language placement test. Ten hours lecture, one additional hour to be arranged working in Cross Cultural Partners and/or use of the English as a Second Language Laboratory and/or use of the Listening and Speaking Laboratory and/or work in the Writing and Reading Center and/or civic engagement and/or community service. Development of English speaking, listening, reading and writing skills. Practice in listening to and using basic forms of conversational English to ask and answer questions on a variety of cultural topics. Development of basic reading comprehension and vocabulary. Practice in writing sentences, short narratives, explanations, and descriptions.	<b>10 Units</b>
<b>ESL 216</b>	<b>Advanced Reading Practice</b> (Formerly English as a Second Language 116.) Credit course - Does not apply to De Anza Associate degree. (Restricted to students whose native language is not English.) Prerequisite: English as a Second Language 252. One hour lecture-laboratory. (May be repeated once for credit.) Pass-No Pass (P-NP) course. Extensive reading to expand vocabulary, develop critical reading skills, and improve ability to analyze reading selections through small group discussion.	<b>1/2 Unit</b>	<b>ESL 235</b>	<b>Basic Grammar Workshop</b> (Formerly English as a Second Language 135.) Credit course - Does not apply to De Anza Associate degree. (Restricted to students whose native language is not English.) Prerequisite: English as a Second Language 244. One hour lecture-laboratory. (May be taken three times for credit.) Pass-No Pass (P-NP) course. Focus on a review of basic verb tenses, forms, and usage.	<b>1/2 Unit</b>
<b>ESL 223</b>	<b>Reading and Vocabulary Building</b> (Formerly English as a Second Language 123.) Credit course - Does not apply to De Anza Associate degree. (Restricted to students whose native language is not English.) Prerequisite: English as a Second Language 234. One hour lecture-laboratory. (May be repeated once for credit.) Pass-No Pass (P-NP) course. Basic reading skills and vocabulary with practice in morphology, grammar, and word usage.	<b>1/2 Unit</b>	<b>ESL 236</b>	<b>Contextualized Grammar and Writing</b> (Formerly English as a Second Language 136.) Credit course - Does not apply to De Anza Associate degree. (Restricted to students whose native language is not English.) Prerequisite: English as a Second Language 253. Advisory: English as a Second Language 263 and 273 (may be taken concurrently). Two hours lecture-laboratory. Pass-No Pass (P-NP) course. Focus on grammatical structure in complex sentences and connected pieces of writing and on correcting common usage problems.	<b>1 Unit</b>
<b>ESL 224</b>	<b>Reading Comprehension</b> (Formerly English as a Second Language 124.) Credit course - Does not apply to De Anza Associate degree. (Restricted to students whose native language is not English.) Prerequisite: English as a Second Language 244. One hour lecture-laboratory. (May be repeated once for credit.) Pass-No Pass (P-NP) course. Basic reading skills with an emphasis on reading comprehension.	<b>1/2 Unit</b>	<b>ESL 244</b>	<b>Intermediate English as a Second Language</b> (Formerly English as a Second Language 144.) Credit course - Does not apply to De Anza Associate degree. (Restricted to students whose native language is not English.) Prerequisites: Qualifying score on the English as a Second Language Placement Test or English as a Second Language 234 with a grade of C or better. Ten hours lecture. Development of English speaking, listening, reading and writing skills. Includes pronunciation practice, vocabulary building skills, writing short compositions and discussion of cross-cultural topics.	<b>10 Units</b>
<b>ESL 225</b>	<b>Practice in Basic Writing</b> (Formerly English as a Second Language 125.) Credit course - Does not apply to De Anza Associate degree. (Restricted to students whose native language is not English.) Prerequisite: English as a Second Language 244. Corequisite: English as a Second Language 225 students must also enroll in English as a Second Language 253. One hour lecture-laboratory. Pass-No Pass (P-NP) course. Development of basic writing skills utilizing the forms and conventions of standard written English through practice in writing and editing connected narratives, descriptions, and explanations.	<b>1/2 Unit</b>	<b>ESL 250A</b>	<b>English as a Second Language for Introduction to Child Development Programs</b>	<b>3 Units</b>
<b>ESL 226</b>	<b>Practice in Essay Writing</b>	<b>1/2 Unit</b>	<b>ESL 250B</b>	<b>English as a Second Language for Child Development (The Early Years)</b>	<b>3 Units</b>
<b>ESL 226X</b>	(Formerly English as a Second Language 126 and 126X.) Credit course - Does not apply to De Anza Associate degree. (English as a Second Language 226X is for repeaters only.) (Restricted to students whose native language is not English.) Prerequisite: English as a Second Language 263 or qualifying score on the English as a Second Language Placement Test. Corequisite: English as a Second Language 226 and 226X students must also enroll in English as a Second Language 273. One hour lecture-laboratory for each one-half unit of credit. Pass-No Pass (P-NP) course. Development of analytical writing skills using clear, expository English prose in well-developed paragraphs and short essays.	<b>1 Unit</b>	<b>ESL 250C</b>	<b>English as a Second Language for Child, Family, and Community Interrelationships</b>	<b>3 Units</b>
<b>ESL 230</b>	<b>Studies in American Language and Culture</b>	<b>1 Unit</b>	Credit course - Does not apply to De Anza Associate degree. Advisory: English as a Second Language 251, 252 and 253 or a qualifying score on the English as a Second Language placement test. Three hours lecture. Pass-No Pass (P-NP) course. Language support for non-native English speakers taking Child Development courses, including listening/speaking, reading, writing, and vocabulary building strategies and test-taking and study skills to help students successfully understand Child Development courses, textbooks, class group discussions, and writing and interview assignments.		
<b>ESL 230W</b>		<b>2 Units</b>	<b>ESL 251</b>	<b>High Intermediate Listening and Speaking</b>	<b>3 Units</b>
<b>ESL 230X</b>		<b>3 Units</b>	(Formerly English as a Second Language 151.) Credit course - Does not apply to De Anza Associate degree. (Restricted to students whose native language is not English.) Prerequisite: English as a Second Language 244; or a qualifying score on the English as a Second Language placement test. Corequisite: English as a Second Language 251 students may also take English as a Second Language 252 and 253 concurrently. Three hours lecture, one-half additional hour to be arranged working in Cross Cultural Partners and/or use of the English as a Second Language Laboratory and/or use of the Listening and Speaking Laboratory and/or work in the Writing and Reading Center and/or civic engagement and/or community service. English speaking and listening practice in a variety of contexts. Development of vocabulary appropriate in both formal and informal situations. Discussion and analysis of topics in American culture and cultural differences.		
<b>ESL 230Y</b>	(Formerly English as a Second Language 130, 130W-Y.) Credit course - Does not apply to De Anza Associate degree. (Restricted to students whose native language is not English.) One hour lecture for each unit of credit. Pass-No Pass (P-NP) course. English conversation and listening for clear communication in a variety of contexts. Customs and attitudes in American culture.	<b>4 Units</b>			

<p><b>ESL 252 High Intermediate Reading 3 Units</b> (Formerly English as a Second Language 152.) Credit course - Does not apply to De Anza Associate degree. (Restricted to students whose native language is not English.) Prerequisite: English as a Second Language 244; or a qualifying score on the English as a Second Language placement test. Corequisite: English as a Second Language 252 students may also take English as a Second Language 251 and 253 concurrently. Three hours lecture, one-half additional hour to be arranged working in Cross Cultural Partners and/or use of the English as a Second Language Laboratory and/or use of the Listening and Speaking Laboratory and/or work in the Writing and Reading Center and/or civic engagement and/or community service. Development of English reading comprehension and vocabulary building skills in extended written materials.</p>	<p><b>ESL 263 Low Advanced Grammar and Writing 4 Units</b> (Formerly English as a Second Language 163.) Credit course - Does not apply to De Anza Associate degree. (Restricted to students whose native language is not English.) Prerequisite: English as a Second Language 225 and 253; or a qualifying score on the English as a Second Language placement test. Corequisite: English as a Second Language 263 students may also enroll in English as a Second Language 261 and 262 concurrently. Four hours lecture, one additional hour to be arranged working in Cross Cultural Partners and/or use of the English as a Second Language Laboratory and/or use of the Listening and Speaking Laboratory and/or work in the Writing and Reading Center and/or civic engagement and/or community service. Paragraph and short essay writing skills. Using clear expository English prose in well-developed paragraphs and short essays.</p>
<p><b>ESL 253 High Intermediate Grammar and Writing 4 Units</b> (Formerly English as a Second Language 153.) Credit course - Does not apply to De Anza Associate degree. (Restricted to students whose native language is not English.) Prerequisite: English as a Second Language 244; or a qualifying score on the English as a Second Language placement test. Corequisite: English as a Second Language 253 students must also enroll in English as a Second Language 225; and may enroll in English as a Second Language 251 and 252 concurrently. Four hours lecture. Writing short connected narratives, descriptions, and explanations using a variety of sentence patterns and following the forms and conventions of standard written English.</p>	<p><b>ESL 264 Low Advanced Grammar and Writing Lab 1/2 Unit</b> (Formerly English as a Second Language 164.) Credit course - Does not apply to De Anza Associate degree. (Restricted to students whose native language is not English.) Prerequisite: English as a Second Language 225, 251, 252 and 253. Advisory: English as a Second Language 263 or 273 (may be taken concurrently). One hour lecture-laboratory. Pass-No Pass (P-NP) course. Development of writing skills with an emphasis on the ability to summarize, analyze and respond to reading selections in well-developed extended discourse.</p>
<p><b>ESL 254 American Language and Culture Through Movies and Television Shows 3 Units</b> (Formerly English as a Second Language 154.) Credit course - Does not apply to De Anza Associate degree. (Restricted to students whose native language is not English.) Prerequisite: English as a Second Language 251; or a qualifying score on the English as a Second Language placement test. Three hours lecture. American culture, language, common idioms and slang through viewing and listening to movies and television shows. Development of aural comprehension and oral communication skills in a lecture format to provide opportunities for interaction and discussion in a large classroom setting.</p>	<p><b>ESL 272 Advanced Reading and Vocabulary 5 Units</b> (Formerly English as a Second Language 172.) Credit course - Does not apply to De Anza Associate degree. (Restricted to students whose native language is not English.) Prerequisite: Reading 200 (or Language Arts 200), or English as a Second Language 262; or a qualifying score on the English as a Second Language Placement Test. Corequisite: May be taken concurrently with English as a Second Language 273. Five hours lecture, one additional hour to be arranged working in Cross Cultural Partners and/or use of the English as a Second Language Laboratory and/or use of the Listening and Speaking Laboratory and/or work in the Writing and Reading Center and/or civic engagement and/or community service. Development of academic vocabulary and reading skills through extensive reading of college level material in English.</p>
<p><b>ESL 260 Accent Reduction (for Non-Native Speakers) 3 Units</b> (Formerly English as a Second Language 160.) Credit course - Does not apply to De Anza Associate degree. (Restricted to students whose native language is not English.) Advisory: English as a Second Language 251. Two hours lecture, three hours laboratory. Pass-No Pass (P-NP) course. Emphasis on production of speech that is intelligible and accurate, through study and practice of English language sound system, stress, linking, reduction, rhythm, and intonation patterns.</p>	<p><b>ESL 273 Introduction to the Essay 5 Units</b> (Formerly English as a Second Language 173.) Credit course - Does not apply to De Anza Associate degree. (Restricted to students whose native language is not English.) Prerequisite: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263 with a grade of C or better; or qualifying score on the English as a Second Language placement test. Corequisite: English as a Second Language 273 students must also enroll in English as a Second Language 226; and may also enroll in English as a Second Language 272. Five hours lecture. Principles of paragraph and short essay writing.</p>
<p><b>ESL 261 Low Advanced Listening and Speaking 3 Units</b> (Formerly English as a Second Language 161.) Credit course - Does not apply to De Anza Associate degree. (Restricted to students whose native language is not English.) Prerequisite: English as a Second Language 251 or a qualifying score on the English as a Second Language placement test. Corequisite: English as a Second Language 261 students may enroll in English as a Second Language 262 and 263 concurrently. Three hours lecture. Speaking and listening; emphasis on comprehension and analysis of information; expression of students' ideas using a variety of levels of sophistication. Development of listening, pronunciation and note-taking skills.</p>	<p><b>ESL 274 Grammar and Proofreading for Academic Writing 4 Units</b> (Formerly English as a Second Language 174.) Credit course - Does not apply to De Anza Associate degree. (Recommended for students whose native language is not English and students who wish to improve their grammar and proofreading skills.) Prerequisite: English as a Second Language 261, 262, 263; English Writing 200. (Also listed as English Writing 274. Student may enroll in either department, but not both, for credit.) Four hours lecture. Focus on helping students become successful academic writers by addressing their needs (a) to understand grammatical structures fundamental to college writing and (b) to develop effective proofreading skills.</p>
<p><b>ESL 262 Low Advanced Reading 3 Units</b> (Formerly English as a Second Language 162.) Credit course - Does not apply to De Anza Associate degree. (Restricted to students whose native language is not English.) Prerequisite: English as a Second Language 252 or a qualifying score on the English as a Second Language placement test. Corequisite: English as a Second Language 262 students may also enroll in English as a Second Language 261 and 263 concurrently. Three hours lecture, one-half additional hour to be arranged working in Cross Cultural Partners and/or use of the English as a Second Language Laboratory and/or use of the Listening and Speaking Laboratory and/or work in the Writing and Reading Center and/or civic engagement and/or community service. Development of advanced reading comprehension, vocabulary building skills, and improved reading rate in extended written materials.</p>	<p><b>ESL 290 Listening/Speaking/Grammar Practice with Interactive Multimedia Software (Intro and Middle Mastery) 1/2 Unit</b> Credit course - Does not apply to De Anza Associate degree. One and one-half hours laboratory. (May be taken up to six times for credit.) Pass-No Pass (P-NP) course. Interactive, computer-based multimedia course providing practice in listening, speaking, vocabulary, grammar, and pronunciation skills for non-native speakers of English using English as a Second Language software. Prescriptive individual educational plan provided for each student.</p>

**ESL 291 Listening/Speaking/Grammar Practice 1/2 Unit**  
 (Formerly English as a Second Language 191.)  
 Credit course - Does not apply to De Anza Associate degree.  
 Advisory: English as a Second Language 244.  
 (Also listed as Skills 291. Student may enroll in either department, but not both, for credit.)  
 One and one-half hours laboratory.  
 (Any combination of Skills 291 and English as a Second Language 291 may be taken six times for credit.)  
 Pass-No Pass (P-NP) course.  
 Interactive computer-based multimedia course providing practice in listening, speaking, vocabulary, grammar, and pronunciation skills for nonnative speakers of English. Prescriptive individual educational plan provided for each student. Videos in realistic school/life situations and American culture.

## Environmental Science

**ESCI 1 Environmental Science 4 Units**  
 (Formerly Environmental Science 51.)

(See general education pages for the requirement this course meets.)  
 Advisory: English Writing 1A or English as a Second Language 5.  
 Four hours lecture, one additional hour to be arranged in the Kirsch Center Resource Center or the Cheeseman Environmental Study Area. (One-day field trip outside of scheduled class time may be required for this course.)  
 An introduction to environmental science as a branch of the sciences and its relation to the scientific field. Review of the principles of environmental and ecological literacy as well as trends in restoration ecology, regenerative and sustainable studies, including Agenda 21 and other environmental indicator tools as they relate to humans including all cultural, ethnic and gender groups, and the earth's systems.

**ESCI 1L Environmental Science Laboratory 1 Unit**  
 (Formerly Environmental Science 51L.)

(See general education pages for the requirement this course meets.)  
 Advisory: English Writing 1A or English as a Second Language 5.  
 Three hours laboratory, one additional hour to be arranged in the Kirsch Center Resource Center or the Cheeseman Environmental Study Area.  
 An introduction to environmental science as a branch of the sciences and its relation to the scientific field in a laboratory and field setting. Applications of environmental, ecological and sustainability principles as they relate to human societies will be explored.

**ESCI 19 Environmental Biology 5 Units**  
 (Formerly Biology 19.)

(See general education pages for the requirement this course meets.)  
 Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.  
 Four hours lecture, three hours laboratory, one additional hour to be arranged in the Kirsch Center Resource Center or the Cheeseman Environmental Study Area. (One-day field trip outside of scheduled class time may be required for this course.)  
 An introduction to environmental biology as a branch of the environmental sciences and its relation to the scientific field. Review of the principles of environmental biology, ecology and conservation as they relate to natural resource use, the biodiversity crisis, pollution, human population and the impacts on all cultural, ethnic and gender groups.

**ESCI 20 Introduction to Biodiversity 5 Units**  
 (Formerly Biology 20.)

(See general education pages for the requirement this course meets.)  
 Advisory: English Writing 1A or English as a Second Language 5; Environmental Science 19.  
 Four hours lecture; three hours laboratory, one additional hour to be arranged in the Kirsch Center Resource Center or the Cheeseman Environmental Study Area.  
 Introduction to biodiversity conservation as a branch of the environmental sciences, conservation biology and related scientific fields. Includes survey of species and ecosystem diversity, elements of biological classification; evolutionary trends and the mechanisms of evolution; ecology and the importance and problems of biodiversity conservation today.

**ESCI 21 Biodiversity 2 5 Units**  
 (Formerly Biology 21.)

Advisory: Environmental Science 20; English Writing 1A or English as a Second Language 5.  
 Four hours lecture; three hours laboratory, one additional hour to be arranged in the Kirsch Center Resource Center or the Cheeseman Environmental Study Area.  
 A survey of the California Floristic Province, emphasizing the ways California's biodiversity is sampled and studied. Includes hands-on fieldwork surveying vegetation and animal populations; discussion of societal impacts of biodiversity loss and conservation; and the importance of biodiversity conservation today.

**ESCI 30 Conservation Biology 5 Units**  
 (Formerly Biology 30.)

(See general education pages for the requirement this course meets.)  
 Advisory: English Writing 1A or English as a Second Language 5.  
 Four hours lecture; three hours laboratory, one additional hour to be arranged in the Kirsch Center Resource Center or the Cheeseman Environmental Study Area.  
 An introduction to conservation biology as a branch of the environmental sciences with particular focus on maintaining genetic, species and ecological diversity of life on Earth. Contemporary bio-conservation issues will be explored and adaptive, community-based conservation techniques applied to develop practical problem-solving approaches to the biodiversity crisis. In addition cultural, economic and philosophical aspects of biodiversity conservation will be explored. Off-campus field trips will be required.

**ESCI 50 Introduction to Wildlife Corridor Technician: Connectivity 2 Units**

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.  
 Two hours lecture.  
 Explore wildlife corridors (connectivity) practice and technology in the 21st century including the scientific principles of corridor ecology, landscape ecology and ecosystem (adaptive) management. Apply the principles (theory) of wildlife corridor technology to assist in the preservation, protection and restoration of native species and ecosystems.

**ESCI 52 Wildlife Corridor Technician: Animal Tracking Techniques 1 Unit**

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.  
 One hour lecture.  
 Explore the techniques of animal tracking and observation. Apply the field (practical) techniques used in wildlife corridor technology to assist in the preservation, protection and restoration of native species and ecosystems.

**ESCI 53 Wildlife Corridor Technician: Data Collection 1 Unit**

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.  
 Three hours laboratory.  
 Explore the data collection techniques, protocol and equipment utilized in wildlife corridor technology. Apply the data collection techniques used in the wildlife corridor discipline to assist in the preservation, protection and restoration of native species and ecosystems.

**ESCI 54 Wildlife Corridor Technician: Data Analysis 1 Unit**

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.  
 One hour lecture.  
 Explore the data analysis techniques (including least cost path analysis), protocol and equipment utilized in wildlife corridor technology. Apply the data analysis techniques utilized in the wildlife corridor discipline to assist in the preservation, protection and restoration of native species and ecosystems.

**ESCI 55 Wildlife Corridor Technician: Corridor Design 1 Unit**

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.  
 One hour lecture.  
 Examine the process of wildlife corridor (connectivity) design in the 21st century, incorporating the principles and challenges of corridor ecology, ecosystem (adaptive) management and the urban-wildlife interface. Apply the principles of wildlife corridor design to assist in the preservation, protection and restoration of native species and ecosystems.

**ESCI 56 Wildlife Corridor Technician: Plant Survey Techniques 1 Unit**

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.  
 One hour lecture.  
 Examine the plant survey techniques and plant community ecology principles utilized in wildlife corridor design, preservation or restoration. Apply these plant survey techniques to assist in the preservation, protection and restoration of native species and ecosystems.

**ESCI 57 Wildlife Corridor Technician: Advanced Tracking 2 Units**

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.  
 Six hours laboratory.  
 Advanced tracking field studies lab course exploring wildlife movement and activities along the 37th parallel (Santa Cruz Mountains through the Diablo Range). Apply the principles of wildlife corridor technology to assist in the preservation, protection and restoration of native species and ecosystems.

**ESCI 58 Wildlife Corridor Technician:  
Advanced Tracking 2 4 Units**

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Twelve hours laboratory.

Advanced tracking, level 2, field studies lab course exploring wildlife movement, activities and analysis along the 37th parallel (Santa Cruz Mountains through the Diablo Range) and statewide (C to C: Coyote Valley to Carrizo Plains National Monument). Apply the advanced tracking principles and techniques to a statewide corridor case study (California's New Model for Corridors, Connectivity, Children & Capital) to assist in the preservation, protection and restoration of native species and ecosystems statewide.

**ESCI 61 Introduction to Photovoltaic  
(PV) Technology 3 Units**

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Three hours lecture.

An introduction to the fundamentals of photovoltaic (PV) basics including how solar cells convert sunlight to electricity, solar potential, types of solar systems, system size requirement and design, net metering options, rebate programs, and related topics for your home or business. An emphasis on the benefits of renewable energy technology as well as how to understand and review multiple bids and analyzing the economics of a PV installation. Good introductory course for students considering the North American Board of Certified Energy Practitioners (NABCEP) certification program. Out-of-class field trips may be required for this course.

**ESCI 63 Photovoltaic (PV)  
Technology Field Project 2 Units**

Advisory: Environmental Sciences 61; English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Six hours laboratory.

A photovoltaic (PV) technology field studies course emphasizing hands-on learning of solar angle/orientation and energy use calculation, PV systems design and installation for residential and commercial projects. Good field studies course for students considering the North American Board of Certified Energy Practitioners (NABCEP) certification program. Out-of-class field trips are required for this course.

**ESCI 77 Special Projects in Environmental Science 1 Unit  
ESCI 77X 2 Units  
ESCI 77Y 3 Units**

Prerequisite: Consent of instructor and division dean.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Three hours laboratory for each unit of credit.

(Any combination of Environmental Science 77, 77X and 77Y may be taken up to six times, not to exceed 18 units, as long as the topics/projects are different each time.)

Individual research in environmental science. Specific projects determined on consultation with the instructor. Outside reading and written report required.

**ESCI 81 Introduction to Ecotourism  
in the 21st Century 1 Unit**

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

One hour lecture, one additional hour to be arranged in the Kirsch Center Resource Center or the Cheeseman Environmental Study Area.

Explore the newly emerging field of ecotourism in the 21st century including the principles of ecosystem management and restoration ecology and community-based coalition models throughout the Americas. Apply the community-based ecotourism model of collaboration to local environmental case studies to preserve, protect and restore native species and ecosystems.

## Environmental Studies

**E S 1 Introduction to Environmental Studies 4 Units**

(See general education pages for the requirement this course meets.)

Advisory: English Writing 1A or English as a Second Language 5.

Four hours lecture, one additional hour to be arranged in the Kirsch Center Resource Center or the Cheeseman Environmental Study Area, one field trip may be required outside of class time.

An interdisciplinary study of the use of the earth's natural resources by human civilizations, past and present, and the role that economics, ethics, law, history, politics, culture and gender inequity have played in resource use and distribution.

**E S 2 Humans, the Environment,  
and Sustainability 4 Units**

(Formerly Environmental Studies 52.)

(See general education pages for the requirement this course meets.)

Advisory: English Writing 1A or English as a Second Language 5.

Four hours lecture, one additional hour to be arranged in the Kirsch Center Resource Center or the Cheeseman Environmental Study Area. (One field trip may be required outside of class time.)

A study of human evolution, biology, and ecology, including human civilizations, past and present, and the interaction with the environment. Environmental world views (ethics), past and present, of the various cultural, ethnic, gender and socioeconomic groups will be explored.

**E S 3 Imagery of the Environment 4 Units**

(Formerly Environmental Studies 53.)

(See general education pages for the requirement this course meets.)

Advisory: English Writing 1A or English as a Second Language 5.

Four hours lecture, one additional hour to be arranged in the Kirsch Center Resource Center or the Cheeseman Environmental Study Area. (One field trip outside of class may be required for this course.)

An introduction to the academic discipline of Environmental Studies through historical and contemporary analysis of nature-based imagery. What those representations indicate about past and present environmental changes will be discussed. Roles of the artist as a naturalist, scientist and conservationist will be explored, as well as visual representation by a diverse range of cultural groups.

**E S 6 Introduction to Environmental Law 4 Units**

(Formerly Environmental Studies 60.)

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Four hours lecture, one additional hour to be arranged in the Kirsch Center Resource Center or the Cheeseman Environmental Study Area.

Today's environmental careers demand proficiency in environmental law. Environmental law is a critical subject of study as it is one of the primary ways that we, as a society, create and establish environmental protections. Includes information regarding laws about land use, energy, natural resources, air, water, and hazardous materials and waste. Current events, citizen action and impacts on various cultural, ethnic, and gender groups will be discussed.

**E S 50 Introduction to Pollution  
Prevention, Hazardous Waste,  
and Environmental Justice 4 Units**

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Four hours lecture.

What kind of effects do hazardous wastes have on our health and the health of the environment? How will California, with its increasing population, provide public leadership and innovative solutions regarding environmental justice, green chemistry, and other political, social, and environmental issues? These above topics will be explored with respect to pollution prevention and environmental statutes. Requirements and applications of federal, state and local laws and regulations relating to hazardous materials will be discussed. Cultural, ethnic, socioeconomic, and gender groups will be discussed in depth especially with respect to environmental injustice and racism.

**E S 55 Ten Steps to Effective Learning  
in Environmental Studies 1 Unit**

Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263.

One hour lecture.

Effective learning strategies in environmental studies including energy management technology, conservation biology, environmental education, ecological restoration, watershed management, environmental law, and other related coursework. Effective learning strategies throughout all disciplines will be discussed. Students will prepare a personal 10-step learning strategies plan. Emphasis on strategies to enhance learning for all cultural, ethnic, and gender groups.

**E S 56 Environmental Health and Justice 4 Units**

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Four hours lecture.

Are you concerned about your health as well as the subject of environmental health and justice? Explores biological, chemical and physical environmental hazards to human health. Investigates laws and regulations concerning environmental exposure and the means to reduce human health risks. Current events, citizen action and impacts on cultural, ethnic, and gender groups will be discussed in general, and as they relate to environmental health and justice.

De Anza College is  
a smoke-free campus



**E S 58 Introduction to Green Building 1 Unit**

*Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263.*  
One hour lecture.

An overview of strategies to implement a green building project within your organization. The strategies include model green building policy and guidelines including LEED (Leadership in Energy and Environmental Design), assembling a green team, assessing the impact of construction and buildings on society, and an overview of key stakeholders in the construction field.

**E S 61A Environmental Protection and Pollution Prevention with Emphasis on Local and Regional Communities 4 Units**

*Advisory: Environmental Studies 6 (may be taken concurrently); English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.*

Four hours lecture, one additional hour to be arranged in the Kirsch Center Resource Center or the Cheeseman Environmental Study Area.

Explores environmental protection and pollution prevention with emphasis on local and regional communities. Topics discussed will include agency missions and guiding principles, agency philosophies, and agency contacts. Agencies participating include Cal/OSHA, County toxics enforcement, EPA, Bay Area Air Quality Management District. Environmental impacts on cultural, ethnic, and gender groups will be discussed.

**E S 61B Environmental Protection and Pollution Prevention with Emphasis on the State and Federal Levels 4 Units**

*Advisory: Environmental Studies 1 and 6 (Environmental Studies 60 may be taken concurrently); English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.*

Four hours lecture, one additional hour to be arranged in the Kirsch Center Resource Center or the Cheeseman Environmental Study Area.

Examines environmental protection and pollution prevention with emphasis on the state and federal levels. Topics discussed will include agency missions and guiding principles, agency philosophies, and agency contacts for each of the following: California Department of Fish & Game, California Integrated Waste Management Board, California Energy Commission, California Department of Forestry, California Board of Mining and Reclamation, California Environmental Protection Agency, the U.S. Department of Agriculture, the U.S. Department of the Interior, U.S. Fish and Wildlife Service and local boards and commissions. Impacts on cultural, ethnic, and gender groups will be discussed.

**E S 62A Introduction to ISO 14001 1 Unit**

*Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.*

One-hour lecture.

Explore the emerging field of voluntary compliance of environmental regulation in the U.S. and abroad. Assess ISO 14001, a voluntary environmental standard developed by the International Organization for Standardization (ISO), as a strategy to minimize an organization's environmental impact.

**E S 62B ISO 14001: Environmental Management Systems (EMS) 1 Unit**

*Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.*

One-hour lecture.

The next step in ISO 14001 implementation is the development of an Environmental Management System (EMS). Explore a step-by-step approach, using a consensus-based model, to develop an ISO 14001 EMS plan.

**E S 62C ISO 14001: Integration of an EMS Plan 1 Unit**

*Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.*

One-hour lecture.

Explore strategies and principles in the adoption, implementation and integration of an ISO 14001 EMS plan for an organization including both internal and external stakeholders in environmental management.

**E S 62D ISO 14001: Voluntary Audit 1 Unit**

*Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.*

One-hour lecture.

Explore strategies and procedures utilized in the process of voluntary audits of an ISO 14001 Environmental Management System (EMS) plan by an organization.

**E S 65 Environmental Stewardship 1 Unit**

*Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.*

One hour lecture, one additional hour to be arranged in the Kirsch Center Resource Center or the Cheeseman Environmental Study Area.

Explore the role of environmental citizenship including personal responsibility and participation in local environmental case studies along the 37th parallel. Develop an understanding of environmental stewardship principles, including those of other cultural, ethnic and gender groups, and the use of such practices in establishing common ground for community-based decision-making.

**E S 66 Environmental Leadership 1 Unit**

*Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.*

One hour lecture, one additional hour to be arranged in the Kirsch Center Resource Center or the Cheeseman Environmental Study Area.

Explore the role of environmental leadership in the 21st century, including development and implementation of leadership skills and models. Apply those leadership skills and models developed to address local environmental case studies.

**E S 67 Environmental Team-Building 1 Unit**

*Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.*

One hour lecture, one additional hour to be arranged in the Kirsch Center Resource Center or the Cheeseman Environmental Study Area.

Explore the concept of team-building in the 21st century, including development and implementation of team-building skills and models. Apply those team-building skills and models developed to address local environmental case studies.

**E S 68 Community-Based Coalitions and Stakeholders 1 Unit**

*Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.*

One hour lecture, one additional hour to be arranged in the Kirsch Center Resource Center or the Cheeseman Environmental Study Area.

Explore the concept of environmental community-based coalitions in the 21st century, including identifying and integrating key stakeholders. Apply the community-based model of collaboration to address local environmental case studies.

**E S 69 Energy Reliability and Your Organization 1 Unit**

*Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.*

One hour lecture, one additional hour to be arranged in the Kirsch Center Resource Center or the Cheeseman Environmental Study Area. (One out-of-class field trip may be required for this course.)

An overview of strategies to assist in preparing an energy management action plan for your organization and staff. The strategies include model board policy, administrative guidelines, assembling an energy management action team, assessing the impact of energy policy on society, and an overview of key stakeholders in the energy field.

**E S 70 Introduction to Energy Management Technology 1 Unit**

*Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.*

One hour lecture, one additional hour to be arranged in the Kirsch Center Resource Center or the Cheeseman Environmental Study Area. (One out-of-class field trip may be required for this course.)

An overview of the field of Energy Management and its importance in today's society, including future implications, and discussion of careers and impact on modern culture and society. This module introduces the whole building concept and related energy and conservation issues including the building envelope, HVAC systems, lighting, energy management and controls and renewable energy technologies.

**E S 71 The Building Envelope 1 Unit**

*Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.*

One hour lecture, one additional hour to be arranged in the Kirsch Center Resource Center or the Cheeseman Environmental Study Area. (One out-of-class field trip may be required for this course.)

An introduction to the building shell as the primary physical component of any facility which controls energy flow between the interior and exterior of the building. The goal is to develop a qualitative and analytical understanding of the thermal performance of major building envelope components. Topics include walls, doors, glazing (windows), roofing and building skin as well as climatic responsive building design.

**E S 72 Heating, Ventilating and Air Conditioning (HVAC) Systems 1 Unit**

*Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.*

One hour lecture, one additional hour to be arranged in the Kirsch Center Resource Center or the Cheeseman Environmental Study Area. (One out-of-class field trip may be required for this course.)

An introduction to HVAC systems, the systems that provide heating, cooling, humidity control, filtration, and comfort control to facilities. Examines various HVAC systems and their interrelationship with other building systems. Students will consider HVAC technologies that can help facilities managers achieve the goals of lowering energy costs, becoming more environmentally friendly, and enhancing indoor air quality.

<b>E S 73</b>	<b>Electric Motors and Drives</b>	<b>1 Unit</b>	<b>E S 79</b>	<b>Renewable and Alternative Energy Systems</b>	<b>1 Unit</b>
<p><i>Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.</i>  <i>One hour lecture, one additional hour to be arranged in the Kirsch Center Resource Center or the Cheeseman Environmental Study Area. (One out-of-class field trip may be required for this course.)</i>            Examines the opportunities for lowering energy consumption through energy-efficient motors and motor controls, including an introduction to the technology of high efficiency motors and variable frequency drives. Techniques to increase current carrying capacity, improve voltage to equipment, reduce power losses, and lower electric bills will be discussed.</p>			<p><i>Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.</i>  <i>One hour lecture, one additional hour to be arranged in the Kirsch Center Resource Center or the Cheeseman Environmental Study Area. (One out-of-class field trip may be required for this course.)</i>            An introduction to the potential for renewable and alternative energy systems when adding power generation capacity for a site or large facility. Life-cycle cost comparisons between renewable energy systems and conventional power generation and the added potential of reducing peak power demand will be emphasized. Topics include photovoltaic power systems, wind energy systems, and fuel cells.</p>		
<b>E S 74</b>	<b>Lighting Distribution Systems</b>	<b>1 Unit</b>	<b>E S 80</b>	<b>California Field Studies</b>	<b>1 Unit</b>
<p><i>Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.</i>  <i>One hour lecture, one additional hour to be arranged in the Kirsch Center Resource Center or the Cheeseman Environmental Study Area. (One out-of-class field trip may be required for this course.)</i>            Provides an introduction to the fundamentals of lighting and energy management lighting techniques. Discusses the different types of lighting and day-lighting applications used in commercial and institutional buildings, while describing the quality and quantity of lighting needed for certain applications, measuring efficiency, color rendering, ballasts, etc. Lighting design that provides visual comfort at lower energy costs will be emphasized.</p>			<p><b>E S 80X</b> <b>E S 80Y</b> <b>E S 80Z</b></p> <p><i>Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.</i>  <i>One hour lecture for each unit of credit, one additional hour to be arranged in the Kirsch Center Resource Center or the Cheeseman Environmental Study Area. (Off-campus field trips may be required.)</i>            Field observation of California's native plants and animals in aquatic and terrestrial ecosystems, with an emphasis on endangered, rare, protected and reintroduced species. The underlying social, economic and political issues associated with habitat and species loss will be discussed, as well as impacts on various cultural, ethnic and socioeconomic groups.</p>		
<b>E S 75</b>	<b>Electric Power Systems</b>	<b>1 Unit</b>	<b>E S 85A</b>	<b>California Native Plants and Animals</b>	<b>2 Units</b>
<p><i>Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.</i>  <i>One hour lecture, one additional hour to be arranged in the Kirsch Center Resource Center or the Cheeseman Environmental Study Area. (One out-of-class field trip may be required for this course.)</i>            An introduction to electric power systems, focusing on distribution components such as transformers, switch-gear, distribution panels, and wiring. Power systems analysis, preventive maintenance, and record keeping techniques will be discussed. Emphasis will be placed on opportunities within a facility's distribution system to save energy, increase equipment life, and reduce unscheduled outages.</p>			<p><i>Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.</i>  <i>Two hours lecture, one additional hour to be arranged in the Kirsch Center Resource Center or the Cheeseman Environmental Study Area. (Field project required.)</i>            Environmental education and interpretative methods focusing on the native plants and animals of California with an emphasis on local case studies and endangered species. Interpretive techniques utilized in environmental education will be reviewed. Prepares students to lead tours of the Cheeseman Environmental Study Area's outdoor lab. Teaching environmental education and interpretive techniques to various ethnic, cultural and socioeconomic groups will be explored.</p>		
<b>E S 76</b>	<b>Energy Star Products</b>	<b>1 Unit</b>	<b>E S 85B</b>	<b>Cheeseman Environmental Study Area Interpretive Training and Other Docent Activities</b>	<b>2 Units</b>
<p><i>Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.</i>  <i>One hour lecture, one additional hour to be arranged in the Kirsch Center Resource Center or the Cheeseman Environmental Study Area.</i>            An introduction to Energy Star products including high efficiency, high performance commercial, industrial and residential equipment and appliances that reduce energy consumption and save money.</p>			<p><i>Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.</i>  <i>One hour lecture, three hours laboratory, one additional hour to be arranged in the Kirsch Center Resource Center or the Cheeseman Environmental Study Area.</i>            Interpretative techniques of environmental education and environmental outreach utilizing the Cheeseman Environmental Study Area outdoor lab and the Kirsch Center for Environmental Studies. Students will refine the techniques required for leading tours and interpreting California native plant and animal communities in the Environmental Study Area, as well as in any other outdoor settings. Students will lead tours through the Cheeseman Environmental Study Area and the Kirsch Center for Environmental Studies. Strategies for teaching environmental education and nature-based learning with various cultural, ethnic and socio-economic groups will also be explored. Off-campus field trips are required for this course.</p>		
<b>E S 76A</b>	<b>Solar Thermal Systems</b>	<b>1 Unit</b>	<b>E S 86</b>	<b>Global Field Studies</b>	<b>4 Units</b>
<p><i>(Formerly Environmental Studies 77.)</i>  <i>Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.</i>  <i>One hour lecture.</i>            An overview of solar thermal systems including water heating technologies which reduce energy use to generate hot water, including maintaining equipment and insulation, reducing hot water use and water temperature, reducing heat losses from the system, and utilizing waste heat sources and renewable energy technologies, including solar.</p>			<p><i>Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.</i>  <i>Four hours lecture. (Field trip required.)</i>            Field observation of the native plants and animals of aquatic and terrestrial ecosystems of various natural areas worldwide, including tropical regions of the Americas, with an emphasis on endangered, rare, protected and reintroduced species. Social, economic and political issues associated with habitat and species loss as well as the impacts on cultural, ethnic and socioeconomic groups will be explored. Note that this field studies class may require a trip abroad.</p>		
<b>E S 77X</b>	<b>Special Projects in Environmental Studies</b>	<b>1 Unit</b>	<b>E S 90</b>	<b>Environmental Research and Field Methods</b>	<b>4 Units</b>
<b>E S 77Y</b>		<b>2 Units</b>	<p><i>Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.</i>  <i>Four hours lecture, one additional hour to be arranged in the Kirsch Center Resource Center or the Cheeseman Environmental Study Area.</i>            Explores the various methods used to conduct research and field studies on environmental topics. Application of legal policy and field research principles and techniques, including review of local case studies. Preparation of press releases, reports on current environmental issues, persuasive oral advocacy of environmental topics and case law research.</p>		
<b>E S 77Z</b>		<b>3 Units</b>			
<p><i>Prerequisite: Consent of instructor and division dean.</i>  <i>Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.</i>  <i>Three hours laboratory for each unit of credit.</i>  <i>(Any combination of Environmental Studies 77X, 77Y, and 77Z may be taken up to six times, not to exceed 18 units, as long as the topics/projects are different each time.)</i>            Individual research in environmental studies. Specific projects determined on consultation with the instructor. Outside reading and written report required.</p>					
<b>E S 78</b>	<b>Energy Management Systems and Controls</b>	<b>1 Unit</b>			
<p><i>Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.</i>  <i>One hour lecture, one additional hour to be arranged in the Kirsch Center Resource Center or the Cheeseman Environmental Study Area. (One out-of-class field trip may be required for this course.)</i>            Describes the most commonly used controls and energy management systems in commercial and institutional applications. Topics will include complex automatic systems for major energy-consuming equipment, as well as simple controls, including time clocks, occupancy sensors, photocells, and programmable thermostats. Computer-based energy management systems, as well as control systems to reduce peak electrical demand will be discussed.</p>					

**E S 91X Environmental Education and Nature Based Learning 2 Units**  
**E S 91Z 4 Units**

(Formerly Environmental Studies 100X and 100Z respectively.)  
 Credit course - Does not apply to De Anza Associate degree.  
 (Local field trips may be required.)

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Two hours lecture for the two unit course, four hours lecture for the four unit course.

Environmental education for educators emphasizing environmental and ecological concepts, nature-based learning and other curricula, interpretive techniques, development of classroom lesson plans, a review of field trip sites and other resources available to educators. The Cheeseman Environmental Studies Area and local field trip sites will be explored. Teaching environmental curricula to various cultural, ethnic and socioeconomic groups will be discussed.

**E S 95 Introduction to Environmental Careers 1 Unit**

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

One hour lecture.

Learn about saving the planet through environmental careers, including ecosystem management, restoration ecology, corridors ecology, energy management technology, environmental stewardship, environmental education, watershed management, environmental law, pollution prevention and more. Opportunities for internships and employment in business, industry, public agencies, academia and nonprofit agencies will be explored. Students will prepare an academic plan for their two- or four-year degree, certificate or workplace.

**E S 95A Environmental Studies Internship 1 Unit**

**E S 95B 2 Units**

**E S 95C 3 Units**

**E S 95D 4 Units**

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

One hour lecture for each unit of credit.

A work experience internship seminar that may be taken concurrently with Cooperative Education 50. The seminar will prepare student interns for internships in business, industry or government related to the student's field of study. The internship must occur during the last year of study prior to completion of a degree or certificate program.

## Film and Television Production

**F/TV 1 Introduction to Film 4 Units**

(See general education pages for the requirement this course meets.)

Advisory: English Writing 1A or English as a Second Language 5.

(Also listed as English Literature 1. Student may enroll in either department, but not both, for credit.)

Four hours lecture.

An introduction to the international art of cinema through the techniques and procedures of filmmaking, including screenwriting, cinematography, directing, editing, and sound; through the formal properties of film, such as mise-en-scene, structure, and style; through the relationships between film and society, and through the critical analysis of works of film art.

**F/TV 2A History of Cinema (1895-1950) 4 Units**

**F/TV 2AW 4 1/2 Units**

(See general education pages for the requirement this course meets.)

Advisory: English Writing 1A or English as a Second Language 5.

(Student may enroll in either Film/Television 2A or Film/Television 2AW, but not both, for credit.)

Four hours lecture and one-half hour additional lecture for each one-half unit, as an additional one-half hour lecture per week or as two additional three hour lecture meetings per quarter.

A survey of the international development of the motion picture to 1950 as a distinct form of artistic expression, through classic films, notable artists, and key events; an investigation of the aesthetic, technological, economic, and social factors that contributed to the evolution of film; an examination of the value systems reflected in and shaped by these works from diverse cultures. Film/Television 2AW will cover expanded topics in historiography, such as problems and approaches to historical film research and analysis.

**F/TV 2B History of Cinema (1950-Present) 4 Units**

**F/TV 2BW 4 1/2 Units**

(See general education pages for the requirement this course meets.)

Advisory: English Writing 1A or English as a Second Language 5.

(Student may enroll in either Film/Television 2B or Film/Television 2BW, but not both, for credit.)

Four hours lecture and one-half hour of additional lecture for each one-half unit, as an additional one-half hour lecture per week or as two additional three hour lecture meetings per quarter.

A survey of the international development of the motion picture since 1950 as a distinct form of artistic expression, through classic films, notable artists, and key events; an investigation of the aesthetic, technological, economic, and social factors that contributed to the evolution of film; an examination of the value systems reflected in and shaped by these works from diverse cultures. Film/Television 2BW will cover expanded topics in historiography, such as problems and approaches to historical film research and analysis.

**F/TV 10 Introduction to Electronic Media 4 Units**

(See general education pages for the requirement this course meets.)

Advisory: English Writing 1A or English as a Second Language 5.

(Also listed as Humanities 17. Student may enroll in either department, but not both, for credit.)

Four hours lecture, one additional hour to be arranged.

A survey course of the history, aesthetics, technology and social impacts of electronic media, including film, broadcasting and the Internet. Explores the role of government, advertising, audiences, and emerging technologies, their futures and impacts on global societies.

**F/TV 20 Basic Digital Film/Video Production 4 Units**

Corequisite: Film/Television 20 students must also enroll in Film/Television 54, 54X, 54Y, or 54Z.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Three hours lecture, three hours laboratory.

Digital video production, film-style production techniques including mini-DV and HDV formats: camera operation and procedures, basic principles and techniques of sound and scriptwriting; and film and nonlinear editing.

**F/TV 22 16mm Film Production I 4 Units**

Prerequisite: Film/Television 20.

Corequisite: Film/Television 22 students must also enroll in Film/Television 54, 54X, 54Y, or 54Z.

Three hours lecture, three hours laboratory.

Logistics, scriptwriting, sound recording, film and sound editing. Methods by which visual and aural elements of a motion picture may be organized. The study and analysis of exemplary motion pictures as well as of the student's own work.

**F/TV 41 Film Genres 4 Units**

Advisory: English Writing 1A or English as a Second Language 5.

(Also listed as English Literature 3. Student may enroll in either department, but not both, for credit.)

Four hours lecture.

(Any combination of Film/Television 41 and English Literature 3 may be taken up to three times for credit as long as the topic matter is different each time.)

Analysis of specific film genres such as action-adventure, comedy, film noir, gangster, horror, musical, science fiction, thriller, war film or western within global, historical, social, cultural, industrial and aesthetic contexts. The genre studied changes each quarter (see subtitle in quarterly class schedule).

**F/TV 42 National Cinemas 4 Units**

Advisory: English Writing 1A or English as a Second Language 5.

(Also listed as English Literature 4. Student may enroll in either department, but not both, for credit.)

Four hours lecture.

(Any combination of Film/Television 42 and English Literature 4 may be taken up to three times for credit as long as the topic matter is different each time.)

Analysis of selected national cinemas in terms of major periods, themes and formal parameters, and in relation to both national and international cultural histories. The national cinema studied changes each quarter (see subtitle in quarterly class schedule).

**F/TV 43 Film Artists 4 Units**

Advisory: English Writing 1A or English as a Second Language 5.

(Also listed as English Literature 5. Student may enroll in either department, but not both, for credit.)

Four hours lecture.

(Any combination of Film/Television 43 and English Literature 5 may be taken up to three times for credit as long as the topic matter is different each time.)

Analysis of the works of specific film artists, such as directors, Alfred Hitchcock or Orson Welles; or analysis of the works of artists practicing a specific film craft, such as screenwriting, acting, cinematography or editing. The topic studied changes each quarter (see subtitle in quarterly class schedule).

**F/TV 45 History of Experimental Film/Video 4 Units**

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Four hours lecture.

History and development of experimental film/video; origins in European experimental cinema, American underground film, avant-garde painting, sculpture, music and theater. Evolution of experimental video and electronic developments.