

Manufacturing and CNC Technologies

MCNC 56 Special Projects in Manufacturing and CNC 1 Unit MCNC 56X 2 Units MCNC 56Y 3 Units

(Formerly Manufacturing and Design Technology 56, 56X, Y.)

Prerequisite: Approved special projects contract and appropriate technical background to support the completion of project objectives.

Three hours laboratory for each unit of credit.

(Any combination of Manufacturing and CNC 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.)

Projects advancing student's knowledge and experience in a selected area of Manufacturing and Machining.

MCNC 62A Technical Calculations 2 Units

(Formerly Manufacturing and Design Technology 62A.)

Advisory: English Writing 200 and Reading 201 (or Language Arts 200), or English as a Second Language 261, 262 and 263.

Four hours lecture-laboratory.

The application of fundamental mathematics to various fields of technology including machining, automotive, sheet metal, and similar disciplines. Review and development of arithmetic skills, introduction of basic algebraic concepts and metric conversion. The use of a scientific calculator in problem solving will be emphasized.

MCNC 62B Technical Calculations 2 Units

(Formerly Manufacturing and Design Technology 62B.)

Prerequisite: Manufacturing and CNC 62A.

Four hours lecture-laboratory.

The application of fundamental mathematics to various fields of technology including machining, automotive, mechanical drafting, sheet metal, nursing and similar disciplines. Review and development of algebraic skills, plane geometry, geometric constructions, and trigonometric concepts. The use of a scientific calculator in problem solving is essential.

MCNC 64 Manufacturing Materials and Processes 4 Units

(Formerly Manufacturing and Design Technology 64.)

Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173 ; Manufacturing and CNC 62A or Mathematics 101 or 112.

Two hours lecture, four hours lecture-laboratory.

Applied materials and process analysis, materials and process selection techniques. The role of metals, polymers, ceramics and composites in the casting, molding, forging, forming, machining, joining, and heat and surface treatment processes.

MCNC 71 Introduction to Machining and CNC Processes 4 1/2 Units

Advisory: English Writing 200 and Reading 201 (or Language Arts 200), or English as a Second Language 261, 262 and 263.

Nine hours lecture-laboratory.

Manufacturing lab safety. Precision measuring tools and practices. Basic manual machine operations: pedestal grinders, drill presses, saws, lathes and milling machines. Threads: types, applications and use of taps and dies. Computer Numerical Control (CNC) mills: axis moves, cutters, tooling, basic setup and controller functions. Cutter and machine speed and feed calculations.

MCNC 72 Applied Geometric Inspection Dimensioning and Tolerancing (ANSI Y14.5m); Coordinate Measuring Machines (CMM) 3 Units

(Formerly Manufacturing and Design Technology 72.)

Advisory: English Writing 200 and Reading 201 (or Language Arts 200), or English as a Second Language 261, 262 and 263; experience in blueprint reading.

Six hours lecture-laboratory.

Interpretation of specifications and inspection procedures related to current ASME Y 14.5 Geometric Dimensioning and Tolerancing (GD&T) standards. Applications and capabilities of precision measuring tools, including the computer-aided Coordinate Measuring Machine (CMM), used in manufacturing environments to inspect discrete complex parts. Machine and inspected part setup for measuring form, orientation, and position callouts.

MCNC 74A Survey of Computer Drawings 2 Units

(Formerly Manufacturing and Design Technology 54E.)

Advisory: English Writing 200 and Reading 201 (or Language Arts 200), or English as a Second Language 261, 262 and 263.

Four hours lecture-laboratory.

(May be taken twice for credit if software is different each time.)

Principles and applications of computer drawings using industry standard software. Emphasis on 3-D and articulated drawings.

MCNC 74B Survey of Computer Aided Design 2 Units

(Formerly Manufacturing and Design Technology 54F.)

Advisory: English Writing 200 and Reading 201 (or Language Arts 200), or English as a Second Language 261, 262 and 263; Mathematics 200 or 210 or equivalent.

Four hours lecture-laboratory.

Principles and applications of computer aided design (CAD) using industry standard software. Emphasis on 2D drawings.

MCNC 75A Introduction to Computer-Aided Numerical Control (CNC) Programming and Operation; Mills 4 1/2 Units

Advisory: Manufacturing and CNC 71 or experience in machining processes; English Writing 200 and Reading 201 (or Language Arts 200), or English as a Second Language 261, 262 and 263.

Nine hours lecture-laboratory.

Introduction to mill tool path programming using G and M code format. CNC systems and components including machine controller functions and operations. Program entry, editing, and back plotting. Calculation for mill and lathe cutter compensation. Precision inspection techniques and basic mill setups, including cutting tool selection, and work holding.

MCNC 75B Computer-Aided Numerical Control (CNC) Programming and Operation; Lathes, Advanced Mills 4 1/2 Units

Prerequisite: Manufacturing and CNC 75A with a grade of C or better or equivalent.

Nine hours lecture-laboratory.

Introduction to lathe tool path programming using word address format, including coordinate system, cutter compensation and canned cycles. Advanced mill programming; sub programs, work coordinate system and use of macros. Program entry, editing, and back plotting. Machine controller functions and operations. Single point threading and Unified thread form classes and measurement. Cutting tool insert selection.

MCNC 76A CAD/CAM Based Computer Numerical Control Programming Using Mastercam 4 1/2 Units

(Student may receive credit for one Manufacturing and CNC 76 course with an A through E designation.)

Advisory: Basic understanding of mill and lathe operations; English Writing 200 and Reading 201 (or Language Arts 200), or English as a Second Language 261, 262 and 263.

Nine hours lecture-laboratory.

Three-axis mill programming; creating part geometry, defining tools and tool paths, and using post-processors to produce word-address format programs.

MCNC 76F Advanced CAD/CAM Based Computer Numerical Control Programming Using Mastercam 4 1/2 Units

(Student may receive credit for one Manufacturing and CNC 76 course with an F through J designation.)

Prerequisite: Manufacturing and CNC 76A.

Nine hours lecture-laboratory.

Advanced programming procedures using wireframe, surface and solid models. Editing, post-processing, verifying and running programs on CNC machines.

MCNC 77 Machining Practices Using Conventional Machine Tools, Tool Design, Abrasive Machining 4 1/2 Units

Prerequisite: Manufacturing and CNC 71 with a grade of C or better or equivalent.

Nine hours lecture-laboratory.

Advanced machining practices using conventional machine tools. Introduction to fixture design including location and clamping methods and computation of fits and allowances. Abrasive machining.

MCNC 78 Introduction to Industrial Controllers (PLC) 3 Units

(Formerly Manufacturing and Design Technology 78.)

Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173.

Six hours lecture-laboratory.

(May be repeated for credit as long as two years have elapsed since last enrollment.)

Basic principles and practical applications of Programmable Logic Controllers (PLCs). conversion of relay ladder diagrams to PLC programs; designing PLC programs for practical industrial applications; utilizing peripheral devices such as recorders, input/output modules, CRT, and printers; execute programs in the laboratory controlling the simulated operation of typical industrial control systems.

M **MCNC 200** Open Computer Lab 1/2 Unit
MCNC 200X 1 Unit
MCNC 200Y 1 1/2 Units
MCNC 200Z 2 Units
 (Formerly Manufacturing and CNC Technologies 100, 100X-Z.)
 Corequisite: Manufacturing and CNC 100 and 100X-Z students must also enroll in another Manufacturing and CNC course.
 Three hours laboratory for each unit of credit.
 (Any combination of Manufacturing and CNC 200, 200X, 200Y, and 200Z may be taken up to six times, not to exceed 18 units.)
 Pass-No Pass (P-NP) course.
 Use of Manufacturing and CNC labs for those who need/desire more time to complete application assignments.

Mathematics

MATH 1A Calculus 5 Units
 (See general education pages for the requirement this course meets.)
 Prerequisite: Mathematics 49B (with a grade of C or better); and satisfactory score on Calculus Readiness Test within the past calendar year.
 Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173.
 Five hours lecture.
 Fundamentals of differential calculus.
 (MATH 1A + 1B = CAN MATH 18) (MATH 1A + 1B + 1C = CAN MATH SEQ B) (MATH 1A + 1B + 1C + 1D = CAN MATH SEQ C)

MATH 1B Calculus 5 Units
 (See general education pages for the requirement this course meets.)
 Prerequisite: Mathematics 49B and Mathematics 1A, both, with a grade of C or better; and placement into Mathematics 1A on the Calculus Readiness test.
 Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173.
 Five hours lecture.
 Fundamentals of integral calculus.
 (MATH 1A + 1B = CAN MATH 18) (MATH 1A + 1B + 1C = CAN MATH SEQ B) (MATH 1A + 1B + 1C + 1D = CAN MATH SEQ C)

MATH 1C Calculus 5 Units
 (See general education pages for the requirement this course meets.)
 Prerequisite: Mathematics 1B with a grade of C or better; or equivalent.
 Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173.
 Five hours lecture.
 Infinite series, lines and surfaces in three dimensions, vectors in two and three dimensions, parametric equations of curves, derivatives, and integrals of vector functions.
 (CAN MATH 20) (MATH 1A + 1B + 1C = CAN MATH SEQ B) (MATH 1A + 1B + 1C + 1D = CAN MATH SEQ C)

MATH 1D Calculus 5 Units
 (See general education pages for the requirement this course meets.)
 Prerequisite: Mathematics 1C with a grade of C or better; or equivalent.
 Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173.
 Five hours lecture.
 Partial derivatives, optimization of multivariable functions, multiple integration, calculus of vector functions and vector fields.
 (CAN MATH 22) (MATH 1A + 1B + 1C + 1D = CAN MATH SEQ C)

MATH 2A Differential Equations 5 Units
 (Formerly Mathematics 2C.)
 (See general education pages for the requirement this course meets.)
 Prerequisite: Mathematics 1D with a grade of C or better.
 Five hours lecture.
 Ordinary differential equations and selected applications.
 (CAN MATH 24)

MATH 2B Linear Algebra 5 Units
 (See general education pages for the requirement this course meets.)
 Prerequisite: Mathematics 1D with a grade of C or better.
 Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173.
 Five hours lecture.
 Linear algebra and selected topics of mathematical analysis.
 (CAN MATH 26)

MATH 10 Elementary Statistics and Probability 5 Units
 (See general education pages for the requirement this course meets.)
 Prerequisite: Mathematics 105 or 114 with a grade of C or better; or qualifying score on Intermediate Algebra Placement Test within the past calendar year.
 Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173.
 Five hours lecture.
 Introduction to data analysis making use of graphical and numerical techniques to study patterns and departures from patterns. The student studies randomness with an emphasis on understanding variation, collects information in the face of uncertainty, checks distributional assumptions, tests hypotheses, uses probability as a tool for anticipating what the distribution of data may look like under a set of assumptions, and uses appropriate statistical models to draw conclusions from data. The course introduces the student to applications in engineering, business, economics, medicine, education, the sciences, and other related fields. The use of technology (computers or graphing calculators) will be required in certain applications.
 (CAN STAT 2)

MATH 11 Finite Mathematics 5 Units
 (See general education pages for the requirement this course meets.)
 Prerequisite: Qualifying score on the Math Placement Test within the past calendar year; or Mathematics 105 or 114 with a grade of C or better.
 Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173.
 Five hours lecture or; Four hours lecture and three hours laboratory or; Four hours lecture and two hours lecture-laboratory.
 Application of linear equations, sets, matrices, linear programming, mathematics of finance and probability to real-life problems. Emphasis on the understanding of the modeling process, and how mathematics is used in real-world applications.
 (CAN MATH 12)

MATH 12 Introductory Calculus for Business and Social Science 5 Units
 (See general education pages for the requirement this course meets.)
 Prerequisite: Mathematics 11.
 Five hours lecture.
 Introduction to limits, differentiation, and integration of single variable functions. Differentiation of multivariate functions. Applications in business, economics and social science.
 (CAN MATH 34)

MATH 22 Discrete Mathematics 5 Units
 (See general education pages for the requirement this course meets.)
 Prerequisite: Mathematics 49A with a grade of C or better; or equivalent.
 Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173.
 Five hours lecture.
 Elements of discrete mathematics with applications to computer science. Topics include methods of proof, mathematical induction, logic, sets, relations, graphs, combinatorics, and Boolean algebra.
 (CAN CSCI 26)

MATH 23 Engineering Statistics 5 Units
 (See general education pages for the requirement this course meets.)
 Prerequisite: Mathematics 1C with a grade of C or better.
 Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173.
 Five hours lecture.
 The collection and analysis of information making use of graphical and numerical techniques; the student studies discrete, continuous, cumulative, and joint probability distribution functions and makes use of statistical inference, experimental design, and equation fitting, when appropriate. The course exposes the student to a variety of engineering applications. Certain applications require the use of technology (computers or graphing calculators). Engineering Statistics is a relatively new area of statistics developed in approximately the last 30 years.

MATH 44 Introduction to Contemporary Mathematics 5 Units
 (See general education pages for the requirement this course meets.)
 Prerequisite: Qualifying score on the Intermediate Algebra Placement Test within the past calendar year; or Mathematics 105 or 114 with a grade of C or better.
 Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173.
 Five hours lecture.
 A survey of selected topics from contemporary mathematics, including problem solving techniques and connections between mathematics and culture. Includes a selection of introductory topics from symmetry; graph theory; chaos and fractals; topology; number theory; geometry; combinatorics and counting; the mathematics of social choice; data analysis, probability and statistics.

<p>MATH 46 Mathematics for Elementary Education 5 Units (Formerly Mathematics 63.) (See general education pages for the requirement this course meets.) Prerequisite: Mathematics 105 or 114 with a grade of C or better. Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173. (Also listed as Education 46. Student may enroll in either department, but not both, for credit.) Five hours lecture. 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, and its origins and applications, for elementary school teaching. Mathematical reasoning and problem solving strategies, theory of sets, integers and integral number theory, rationals and proportion, real numbers, decimal notation, and measurement.</p>	<p>MATH 114 College Math Preparation Level 3: Intermediate Algebra 5 Units (Student may not receive credit for both Mathematics 105 and 114.) Prerequisite: Qualifying score on the Math Placement Test within the last calendar year; or Mathematics 112 with a grade of C or better. Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173. Five hours lecture; or four hours lecture and three hours laboratory; or four hours lecture and two hours lecture-laboratory. Application of exponential and logarithmic functions, rational functions, and sequences and series to problems. Emphasis on the development of models of real world applications and interpretation of their characteristics.</p>
<p>MATH 49A Pre-Calculus Algebra 5 Units (See general education pages for the requirement this course meets.) Prerequisite: Mathematics 51 with a grade of C or better, or satisfactory score on Calculus Readiness test within the last calendar year. Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173. Five hours lecture. Polynomial, rational, exponential and logarithmic functions, graphs, solving equations; conic sections.</p>	<p>MATH 210 College Math Preparation Level 1: Pre-Algebra 5 Units (Formerly Mathematics 110.) Credit course - Does not apply to De Anza Associate degree. Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173. Five hours lecture or; four hours lecture and three hours laboratory or; four hours lecture, two hours lecture-laboratory. Use of basic arithmetic in application problems, estimation, the real number system, variables and linear equations, graphs of linear equations and the Cartesian coordinate system, the concept of function.</p>
<p>MATH 49B Pre-Calculus Algebra 5 Units (See general education pages for the requirement this course meets.) Prerequisite: Mathematics 49A with a grade of C or better, or satisfactory score on the Calculus Readiness test within the last calendar year. Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173. Five hours lecture. Systems of equations and inequalities, vectors, lines and planes, sequences and series, polar coordinates.</p>	<p>MATH 250 Math Review and Applications for Health Professionals 1/2 Unit Credit course - Does not apply to De Anza Associate degree. Prerequisite: Qualifying score on Math Placement Test within the last calendar year; or Mathematics 101 or 112 with a grade of C or better. Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173. One hour lecture-laboratory. (May be taken six times for credit.) Pass-No Pass (P-NP) course. Review of basic mathematics with emphasis on applications to nursing and health related fields. Conversion within and between numerical systems.</p>
<p>MATH 51 Trigonometry 5 Units (See general education pages for the requirement this course meets.) Prerequisite: Qualifying score on the Intermediate Algebra Placement Test within the past calendar year; or a grade of C or better in Mathematics 105 or 114. Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173. Five hours lecture. The theory of trigonometric functions and their applications. (CAN MATH 8)</p>	<p>MATH 500 Mathematics Assistance for Success 0 Units Five hours laboratory. (No limit on repeatability for 0 unit classes.) Provides information and assistance to students in mathematics. Laboratories, workshops and related instructional activities are designed to provide the skills needed in mathematical critical thinking, analysis, problem solving, writing, and in the use of technology.</p>
<p>MATH 77 Special Projects in Mathematics 1 Unit MATH 77X 2 Units MATH 77Y 3 Units (Formerly Mathematics 40, 40X, and 40Y.) Three hours laboratory for each unit of credit. (Any combination of Mathematics 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.) Pass-No Pass (P-NP) course. Individual special reading, writing, or study projects in mathematics as determined in consultation with the instructor.</p>	<p>Meteorology MET 10 Weather Processes 4 Units (See general education pages for the requirement this course meets.) Prerequisite: Mathematics 101 or 112. Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173. Four hours lecture. Introduction to the principles of the science of meteorology including: history of the science; origin, evolution and structure of the atmosphere; major atmospheric variables that determine weather; global and local wind circulation; air masses and frontal systems; birth and development of extratropical and tropical cyclones and associated severe weather phenomena; weather map analysis and interpretation; objective techniques used by meteorologists to forecast weather.</p>
<p>MATH 104 Applied Algebra Plus 7 Units (Student may not receive credit for Mathematics 101 and 104.) Prerequisite: Qualifying score on the Math Placement Test within the last calendar year; or Mathematics 200 or 210. Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173. Seven hours lecture; or five hours lecture, four hours lecture-laboratory. Fundamental algebraic operations on real numbers and real variables with emphasis on linear functions and equations, polynomials, rational expressions and equations, plane geometry, elementary trigonometry and their applications as they relate to applied technologies.</p>	<p>MET 10L Meteorology Laboratory 1 Unit (Formerly Meteorology 50L.) (See general education pages for the requirement this course meets.) Prerequisite: Mathematics 101 or 112. Corequisite or Prerequisite: Meteorology 50L students must also enroll in, or have already completed, Meteorology 10. Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173. Three hours laboratory. Introductory weather lab in which students work with observational data, graphics products, charts and instruments used by synoptic meteorologists to forecast weather. Lab sessions will include current weather products downloaded from the American Meteorological Society's "Online Weather Studies" homepage which has been specifically designed for this course and from De Anza College's automated rooftop weather station. Students will practice the analysis and decision-making skills employed by meteorologists to diagnose air patterns, understand air motions and predict future atmospheric conditions.</p>
<p>MATH 112 College Math Preparation Level 2: Beginning Algebra 5 Units Prerequisite: Qualifying score on the Math Placement Test within the last calendar year; or Mathematics 210 with a grade of C or better. Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173. Five hours lecture or; Four hours lecture and three hours lab or; Four hours lecture and two hours lecture-laboratory. Application of linear functions, quadratic functions and linear systems to problems. Emphasis on the development of models or real world applications and interpretation of their characteristics.</p>	

M **MET 77** **Special Projects in Meteorology** **1 Unit**
MET 77X **2 Units**
MET 77Y **3 Units**

*Prerequisite: Consent of instructor and division dean.
 Three hours laboratory for each unit of credit.
 (Any combination of Meteorology 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.)*

Pass-No Pass (P-NP) course.

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

Military Science

(Army Reserve Officers Training Corps)

For information on Army ROTC courses, please see Military Studies in this catalog/schedule.

Military Studies

Military Studies includes the following: Military Science (Army Reserve Officer's Training Corps [ROTC]), Aerospace Studies (Air Force ROTC), and Naval Science (Naval ROTC). Army ROTC courses are offered at Santa Clara University. Aerospace Studies are offered at San Jose State University. The Naval/Marine ROTC program is offered at the University of California at Berkeley; however, it does not have a community college component at this time.

NOTE: Lower division ROTC programs are open to all students and there is no military obligation incurred. However, ROTC scholarships and military commissions do have specific qualifications and commitments. While all students are eligible to take ROTC courses, not all students who take ROTC courses will be eligible for either a scholarship or a military commission.

REGISTRATION NOTE: To register from a community college for ROTC courses, please contact Mission College or West Valley College. De Anza College does not currently provide for ROTC registration for De Anza College students. For further information, please contact the Biological and Health Sciences Division (408) 864-8773.

Aerospace Studies (Air Force Reserve Officers Training Corps)

The Air Force Reserve Officer Training Program (Air Force ROTC) at San Jose State University offers a high quality educational experience structured for all college students. It gives students the opportunity to learn excellent leadership and management skills while training to become a commissioned officer in the Air Force. Academic instruction includes Air Force organization, history, officer skills, leadership and management, and national security policy and issues. Students find out first hand what the Air Force has to offer for scholarships while they are in school and what career opportunities await them after graduation with a Bachelors Degree.

For direct information on the Air Force ROTC program at San Jose State University, contact the Aerospace Studies Department at San Jose Sate University at (408) 924-2960.

Military Science (Army Reserve Officers Training Corps)

The Army Reserve Officer Training Program (Army ROTC) program at Santa Clara University offers a high quality educational experience open to all students. The program is designed to develop men's and women's management skills and leadership abilities for successful careers in both the corporate world and the military. Instruction is conducted on and off the Santa Clara University campus. All courses offered by the Military Science Department are fully accredited and applicable toward fulfilling academic requirements for graduation at Santa Clara University. Through this voluntary program, Santa Clara University offers all eligible students the opportunity to obtain an officer's commission in the U.S. Army Reserve, National Guard, or active Army, while earning their college degree.

For direct information on the Army ROTC program at Santa Clara University, contact the Department of Military Science at Santa Clara University at (408) 554-4033.

Naval Science (Navy Reserve Officers Training Corps)

The Department of Naval Science at the University of California, Berkeley, offers several programs of instruction for men and women leading to reserve commissions in the U.S. Navy or U.S. Marine Corps. There are no Navy ROTC programs available for community college students. For information on the four year institution Navy ROTC program, please contact the Department of Naval Science at (510) 642-3551.

Music

MUSI 1 **Introduction to Music** **4 Units**
(See general education pages for the requirement this course meets.)
Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173.
Four hours lecture, one additional hour to be arranged.
 Introduction to the discipline of music; methods of understanding music available in modern culture; listening techniques; use of fundamental concepts including form, style, musical media, and textures; acquaintance with and comparison of musical examples from various eras and cultures; roles of music in society.

MUSI 2A **History of Western Music** **4 Units**
(See general education pages for the requirement this course meets.)
Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173.
Four hours lecture, one additional hour to be arranged.
 History of Western music from Medieval through Classical eras.

MUSI 2B **History of Western Music** **4 Units**
(See general education pages for the requirement this course meets.)
Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173.
Four hours lecture, one additional hour to be arranged.
 History of Western music in the 19th century: The Romantic era.

MUSI 2C **History of Western Music** **4 Units**
(See general education pages for the requirement this course meets.)
Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173.
Four hours lecture, one additional hour to be arranged.
 History of Western music in the 20th century.

MUSI 3A **Comprehensive Musicianship** **4 Units**
Advisory: Music 10A.
Three hours lecture, two hours lecture-laboratory, one hour laboratory.
 Basic knowledge and skill development including sight singing, rhythmic training, ear training, and keyboard work.

MUSI 3B **Comprehensive Musicianship** **4 Units**
Advisory: Music 3A or equivalent.
Three hours lecture, two hours lecture-laboratory, one hour laboratory.
 Principles, literacy, and parameters of music including writing, sight singing, rhythmic training, ear training, and keyboard work for the student with some basic skills and education in standard notation.

MUSI 3C **Comprehensive Musicianship** **4 Units**
Advisory: Music 3B or equivalent.
Three hours lecture, two hours lecture-laboratory, one hour laboratory.
 Principles, literacy, and parameters or music including writing, sight singing, rhythmic training, ear training, keyboard work, beginning analysis, and simple melody composition.

MUSI 4A **Comprehensive Musicianship II** **4 Units**
Advisory: Music 3C or equivalent.
Three hours lecture, two hours lecture-laboratory, one hour laboratory.
 Principles, literacy, and parameters of music including writing, comprehensive and aural analysis, sight singing, ear training and keyboard work for the more advanced undergraduate student.

MUSI 4B **Comprehensive Musicianship II** **4 Units**
Advisory: Music 4A or equivalent.
Three hours lecture, two hours lecture-laboratory, one hour laboratory.
 Principles, literacy, and parameters of music including writing, comprehensive and aural analysis, sight singing, rhythmic training, ear training, and keyboard work for the more advanced undergraduate student exploring chromatic practice and the limits of the tonal system including a review of diatonic practice in preparation for a typical Music Major Transfer Exam.

MUSI 4C **Comprehensive Musicianship II** **4 Units**
Advisory: Music 4B or equivalent.
Three hours lecture, two hours lecture-laboratory, one hour laboratory.
 Principles, literacy, and parameters of music including writing, comprehensive and aural analysis, sight singing, rhythmic training, ear training, and keyboard work for the more advanced undergraduate student exploring post tonal practice and the influence of non notated, experimentally notated, and non Western music on an emerging world wide art music culture.

MUSI 5A **Modal Counterpoint** **3 Units**
Advisory: Music 3A or equivalent.
Two hours lecture, two hours lecture-laboratory.
 Modal counterpoint in two and three parts using both the species approach and the Phenomenological approach to produce species, imitative, and free counterpoint examples.

MUSI 7A **Introduction to Jazz Styles** **4 Units**
(Formerly Music 7.)
(See general education pages for the requirement this course meets.)
Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173.
Four hours lecture, one additional hour to be arranged.
 Jazz as an American art form, from its origins to the present. Musical and sociological elements of jazz. Listening skills for distinguishing jazz styles and noted performers.

<p>MUSI 7B Introduction to World Music in America 4 Units (Formerly Music 57.) (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.</p> <p>An introduction to music through world music and its influence on current musical trends in the United States. Music of diverse cultures which may include Native Americans, Asia/Pacific Rim, India, Africa, South and Central Americas, Mexico, and the Caribbean are presented in conjunction with American and European traditions; listening skills for distinguishing musical cultures, instrumentation, and artists.</p>	<p>Class instruction for beginners in techniques of solo and group singing. Training in controlling of self-consciousness, as well as tone production, breathing, diction, and musical accuracy. Work is done primarily in class with minimum outside study required. Student's grade depends on attendance as well as progress made during course.</p>
<p>MUSI 8 Intermediate Electronic Music 3 Units (Formerly Music 8B.) Advisory: English Writing 200 and Reading 201 (or Language Arts 200), or English as a Second Language 261, 262 and 263; Music 51. Two hours lecture, two hours lecture-laboratory. (May be taken twice for credit.)</p> <p>Intermediate level electronic music techniques including digital and analog synthesizer sound design and editing; professional studio and computer music software including integrated audio/MIDI sequencing software, instrument editors, software synthesizers; basic audio/MIDI studio configuration; modular synthesis; basic digital audio recording and editing; basic audio signal processing; introduction to concepts of music notation software; historical and technological development of electronic music; roles of electronic music technology in twentieth-century music. Some prior music experience and/or concurrent enrollment in Music 10A or Music 12A is recommended, but not required.</p>	<p>MUSI 13B Beginning Singing II 1 1/2 Units Prerequisite: Music 13A or equivalent training. Three hours lecture-laboratory. (Any combination of Music 13A and 13B may be taken up to six times for the family of courses.)</p> <p>Continuation of Music 13A with emphasis on musicianship, legato singing, correction of individual vocal faults and the rudiments of performance evaluation. While most work is done in class, preparation of songs and exercises must be accomplished outside of class.</p>
<p>MUSI 9 Jazz Piano 2 Units Prerequisite: Ability to play a keyboard instrument and read music. One hour lecture, two hours lecture-laboratory. (May be taken three times for credit.)</p> <p>Development of improvisational skill at the keyboard in the style of jazz pianists since about 1950. Typical chord progressions and left-hand voicings are studied in all twelve keys. Both scalar and motivic approaches to right-hand improvisation are practiced.</p>	<p>MUSI 14A Beginning Classical Guitar 1 1/2 Units Advisory: English Writing 200 and Reading 201 (or Language Arts 200), or English as a Second Language 261, 262 and 263. Three hours lecture-laboratory. (Any combination of Music 14A, 14B, and 14C may be taken up to six times for the family of courses.)</p> <p>Beginning techniques for playing the classical, nylon-stringed guitar.</p>
<p>MUSI 10A Music Fundamentals 3 Units Advisory: English Writing 200 and Reading 201 (or Language Arts 200), or English as a Second Language 261, 262 and 263. Three hours lecture.</p> <p>This course offers a basic introduction to concepts and skills of music notation, rhythm, major and minor scales and keys, simple sight-reading, key signatures, melody, and triads. Open to all students. May be appropriate for students with low scores on the Music 3A diagnostic test. Music Fundamentals students with no previous musical experience may benefit from concurrent enrollment in a beginning instrumental or vocal performance class.</p>	<p>MUSI 14B Intermediate Classical Guitar 1 1/2 Units Prerequisite: Music 14A or equivalent level. Three hours lecture-laboratory. (Any combination of Music 14A, 14B, and 14C may be taken up to six times for the family of courses.)</p> <p>Intermediate level techniques for playing the classical, nylon-stringed guitar.</p>
<p>MUSI 10B Harmony I 3 Units Prerequisite: Music 10A or equivalent. Three hours lecture.</p> <p>The analysis and writing of music which is considered traditional (tonal). Study of traditional harmonies and structures will be supplemented with the use of chord symbols and contemporary popular notational practices. Does not fulfill any music major requirements.</p>	<p>MUSI 14C Advanced Classical Guitar 1 1/2 Units Prerequisite: Music 14B or equivalent level. Three hours lecture-laboratory. (Any combination of Music 14A, 14B, and 14C may be taken up to six times for the family of courses.)</p> <p>Advanced level techniques for playing the classical, nylon-stringed guitar.</p>
<p>MUSI 12A Class Piano I 1 1/2 Units Advisory: Music 10A. Three hours lecture-laboratory. (Any combination of Music 12A, 12B, and 12C may be taken up to six times for the family of courses.)</p> <p>Beginning piano for students with no previous instruction, those who need knowledge of piano for a teaching credential, music majors, and the general student.</p>	<p>MUSI 18 Intermediate Piano 1 1/2 Units Prerequisite: Music 12C. Advisory: English Writing 200 and Reading 201 (or Language Arts 200), or English as a Second Language 261, 262 and 263. Three hours lecture-laboratory. (May be taken three times for credit.)</p> <p>Piano music from the Baroque era to the present, with emphasis on the style of each period and difference in interpretation.</p>
<p>MUSI 12B Class Piano II 1 1/2 Units Prerequisite: Music 12A. Three hours lecture-laboratory. (Any combination of Music 12A, 12B, and 12C may be taken up to six times for the family of courses.)</p> <p>Basic piano for beginning students who read treble and bass clef, and understand music notation.</p>	<p>MUSI 20 De Anza Chorale 2 Units Prerequisite: Singing experience. Enrollment subject to audition. Advisory: English Writing 200 and Reading 201 (or Language Arts 200), or English as a Second Language 261, 262 and 263. Four hours lecture-laboratory, one additional hour to be arranged. (May be taken six times for credit.)</p> <p>Study and performance of classical choral repertoire.</p>
<p>MUSI 12C Class Piano III 1 1/2 Units Prerequisite: Music 12B. Three hours lecture-laboratory. (Any combination of Music 12A, 12B, and 12C may be taken up to six times for the family of courses.)</p> <p>Piano performance with emphasis on interpretation, musical form and harmony.</p>	<p>MUSI 21 Vintage Singers 2 Units Prerequisite: Enrollment subject to audition; ability to read vocal music at sight; a trained voice and choral experience. Corequisite: Music 20 or Music 45F or Music 22 may be required. Two hours lecture-laboratory, three hours laboratory, one additional hour to be arranged. (May be taken six times for credit.)</p> <p>Performance of specialized choral styles from madrigal to modern in an ensemble of limited size. Choral experience, a pleasing voice, and some music reading ability are required, as is attendance at all performances.</p>
<p>MUSI 13A Beginning Singing I 1 1/2 Units Advisable corequisite: Music 102, 12A, or 10A. Three hours lecture-laboratory. (Any combination of Music 13A and 13B may be taken up to six times for the family of courses.)</p>	<p>MUSI 22 Early Music Study and Performance 1 Unit Prerequisite: Enrollment subject to audition; ability to read music; interest in vocal and instrumental styles of the Renaissance. Two hours lecture-laboratory. (May be taken six times for credit.)</p> <p>A study and performance of instrumental and vocal music from the Medieval and Renaissance periods aimed at emulating the spirit and vitality of the age.</p>
	<p>MUSI 24 De Anza Women's Chorus 1 1/2 Units (Formerly Music 23, and Music 55.) Advisory: Singing experience. Enrollment subject to placement audition. Three hours lecture-laboratory, one additional hour to be arranged. (May be taken six times for credit.) Pass-No Pass (P-NP) course.</p> <p>A choir for students interested in singing with a group for enjoyment. Stresses music of various styles. Provides basic technique and experience in choral singing. One public performance will be scheduled each quarter.</p>

MUSI 25G	Performance Workshop (Brass)	3 Units	MUSI 31C	Chamber Orchestra	2 Units
MUSI 25H	Performance Workshop (Guitar)	3 Units	<i>Prerequisite: Audition.</i>		
MUSI 25J	Performance Workshop (Piano)	3 Units	<i>Four hours lecture-laboratory.</i>		
MUSI 25K	Performance Workshop (Reeds)	3 Units	<i>(Any combination of Music 31A, 31B, and 31C may be taken up to six times for the family of courses.)</i>		
MUSI 25M	Performance Workshop (Vocal)	3 Units	Study, preparation and performance of orchestral literature for chamber orchestra with an emphasis on developing proper ensemble techniques of orchestral accompaniment for solo performance. Attendance at all scheduled rehearsals with performances is required.		
MUSI 25N	Performance Workshop (Percussion)	3 Units	MUSI 32	Symphony Orchestra	2 Units
<i>Prerequisite: Placement by audition. For music majors: Music 18 for Music 25J.</i>			<i>Prerequisite: Enrollment subject to audition; ability to play an orchestral instrument and read music at sight.</i>		
<i>Corequisite: Music 25G-N students must also enroll in Music 3A, 3B, 3C; 4A, 4B, 4C; or large group performance (Music 20, 21, 22, 31, 32, 34, 42, 48).</i>			<i>Four hours lecture-laboratory.</i>		
<i>Two hours lecture, three hours laboratory (each course).</i>			<i>(May be taken six times for credit.)</i>		
<i>(Each course may be taken six times for credit.)</i>			Performance of music for symphony orchestra emphasizing the development of good ensemble and proper musical interpretations. Attendance at all scheduled performances is required.		
MUSI 27A	De Anza Jazz Singers I (Introduction to Vocal Jazz Ensemble)	4 1/2 Units	MUSI 34	Jazz Ensemble	3 Units
<i>(Music 27A and 27B were formerly Music 45F.)</i>			<i>Prerequisite: Ability to play an instrument and read music at sight. Enrollment may be subject to audition.</i>		
<i>Prerequisite: Enrollment subject to a standardized audition demonstrating musical ability and technical proficiency at a level suitable to the course level.</i>			<i>Corequisite: it is recommended that Music 34 students also enroll in Music 42 and/or Music 48.</i>		
<i>Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173.</i>			<i>Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173.</i>		
<i>Nine hours lecture-laboratory, one additional hour to be arranged.</i>			<i>Six hours lecture-laboratory.</i>		
<i>(Any combination of Music 27A and 27B may be taken up to six times, not to exceed 18 units for the family of courses.)</i>			<i>(May be taken six times for credit.)</i>		
Introduction to the art of vocal jazz ensemble singing. Study, rehearsal and performance of standard vocal jazz ensemble repertoire. Exposure to microphone technique, vocal improvisation, and ensemble interpretation of jazz styles and phrasing. Developing a working vocabulary of traditional vocal jazz performance techniques and an understanding of the cultural and historical contexts that produced the specific vocal jazz styles.			Sight-reading, preparation, performance and recording of various styles of music composed and arranged for standard jazz ensemble. Emphasis on improvising within the ensemble structure is a goal for each individual.		
MUSI 27B	De Anza Jazz Singers II (Intermediate Vocal Jazz Ensemble)	4 1/2 Units	MUSI 41	Rehearsal and Performance	1/2 Unit
<i>(Music 27A and 27B were formerly Music 45F.)</i>			MUSI 41U		1 Unit
<i>Prerequisite: Enrollment subject to a standardized audition demonstrating musical ability and technical proficiency at a level suitable to the course level.</i>			MUSI 41V		2 Units
<i>Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173.</i>			MUSI 41W		3 Units
<i>Nine hours lecture-laboratory, one additional hour to be arranged.</i>			MUSI 41X		4 Units
<i>(Any combination of Music 27A and 27B may be taken up to six times, not to exceed 18 units for the family of courses.)</i>			<i>Corequisite: Music 41, 41U-X students must also enroll in a music performance or skills course.</i>		
Continuing study of the art of vocal jazz ensemble singing. Study, rehearsal and performance of standard and contemporary vocal jazz ensemble repertoire. Exposure to microphone technique, vocal improvisation, and ensemble interpretation of jazz styles and phrasing. Developing a working vocabulary of traditional vocal jazz performance techniques and an understanding of the cultural and historical contexts that produced the specific vocal jazz styles.			<i>Two hours lecture-laboratory for each unit of credit.</i>		
MUSI 29	Vocal Flight (Advanced Vocal Jazz Ensemble)	4 1/2 Units	<i>(Any combination of Music 41, 41U, 41V, 41W, and 41X may be taken up to six times, not to exceed 18 units, as long as the topics/projects are different each time.)</i>		
<i>Prerequisite: Enrollment subject to a standardized audition demonstrating musical ability and technical proficiency at a level suitable to the course level.</i>			Supervised participation in scheduled rehearsals and public performances in musical productions. Supervised use of individual practice facilities.		
<i>Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173.</i>			MUSI 42	Symphonic Wind Ensemble	2 Units
<i>Nine hours lecture-laboratory, one additional hour to be arranged.</i>			<i>Corequisite: It is recommended that Music 42 students also enroll in Music 25G-K, or Music 34.</i>		
<i>(May be taken six times for credit.)</i>			<i>Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173.</i>		
Advanced study of the art of vocal jazz ensemble singing. Study, rehearsal and performance of standard and contemporary vocal jazz ensemble repertoire. Advanced approach to microphone technique, vocal improvisation, and ensemble interpretation of jazz styles and phrasing. Developing a professional working vocabulary of traditional vocal jazz performance techniques and an understanding of the cultural and historical contexts that produced the specific vocal jazz styles.			<i>Four hours lecture-laboratory.</i>		
MUSI 31A	Chamber Orchestra	2 Units	<i>(May be taken six times for credit.)</i>		
<i>Prerequisite: Audition.</i>			Rehearsal, sight-reading, performance, and recording of wind ensemble literature in a variety of styles and time periods.		
<i>Four hours lecture-laboratory.</i>			MUSI 45C	Jazz Combos	2 Units
<i>(Any combination of Music 31A, 31B, and 31C may be taken up to six times for the family of courses.)</i>			<i>Prerequisite: Enrollment subject to audition; ability to play an instrument.</i>		
Introduction to the study, preparation and performance of orchestral literature for chamber orchestra with an emphasis on developing proper ensemble techniques. Attendance at all scheduled rehearsals and performances is required.			<i>Four hours lecture-laboratory.</i>		
MUSI 31B	Chamber Orchestra	2 Units	<i>(May be taken six times for credit.)</i>		
<i>Prerequisite: Audition.</i>			Preparation and performance of music for jazz combinations. Attendance at all performances is required.		
<i>Four hours lecture-laboratory.</i>			MUSI 46	Beginning Winds and Percussion	2 1/2 Units
<i>(Any combination of Music 31A, 31B, and 31C may be taken up to six times for the family of courses.)</i>			<i>Three hours lecture-laboratory, three hours laboratory.</i>		
Study, preparation and performance of works from orchestral literature for chamber orchestra with an emphasis on developing proper ensemble techniques for dramatic or choral performances. Attendance at all scheduled rehearsals and performances is required.			<i>(May be taken six times for credit.)</i>		
MUSI 31C	Chamber Orchestra	2 Units	Beginning performance methods and techniques on brass, woodwind or percussion instruments. Fundamentals of embouchure, fingerings, articulation, and reading musical notation.		
<i>Prerequisite: Audition.</i>			MUSI 48	Jazz Improvisation	2 1/2 Units
<i>Four hours lecture-laboratory.</i>			<i>Prerequisite: Ability to play an instrument and to read music.</i>		
<i>(Any combination of Music 31A, 31B, and 31C may be taken up to six times for the family of courses.)</i>			<i>Three hours lecture-laboratory, three hours laboratory.</i>		
Study, preparation and performance of orchestral literature for chamber orchestra with an emphasis on developing proper ensemble techniques of orchestral accompaniment for solo performance. Attendance at all scheduled rehearsals with performances is required.			<i>(May be taken six times for credit.)</i>		
<i>Two hours lecture, three hours laboratory (each course).</i>			Development of improvisational skill in the jazz idiom. Analysis and practice of scales, chords, and patterns as applicable to improvisational performance of standard jazz vehicles. Class presentations, music department recitals, attendance at concerts and lectures.		
<i>(Each course may be taken six times for credit.)</i>					

MUSI 51 Introduction to Electronic Music 3 Units
(Formerly Music 51A.)

Advisory: English Writing 200 and Reading 201 (or Language Arts 200), or English as a Second Language 261, 262 and 263.

Two hours lecture, two hours lecture-laboratory.

Introduction to the use of keyboard synthesizers, drum machines, and sequencing software to create music in a variety of styles; basic studio techniques; introduction to Musical Instrument Digital Interface (MIDI); introduction to basic historical developments in electronic music; creation of musical/audio projects using basic electronic music hardware and software. Some prior music experience is recommended but not required.

MUSI 52A Jazz Solo Voice 1 1/2 Units
(Formerly Music 52.)

Prerequisite: Music 13B or equivalent private vocal instruction or experience. All students should have solo experience.

Three hours lecture-laboratory.

Study and performance of songs in the jazz idiom. Areas covered will include musical phrasing, emotional expression, typical vocal techniques, stage presence, use of microphones, (creating lead-sheets and transposing, working terminology, rhythm section work), introduction to vocal jazz improvisation.

MUSI 53 The Music Business 3 Units

Three hours lecture, one additional hour to be arranged.

Introduction to the business aspects of music. Examines problems in dealing with agents, contractors, unions, copyright laws, and the various careers to be found in music. Emphasis on the commercial music field, i.e., sound recording, composition, performance, and business representation.

MUSI 56 Jazz, Blues and Popular Guitar 1 1/2 Units

Prerequisite: Ability to play first-position and moveable major, minor and dominant 7th chords.

Advisory: English Writing 200 and Reading 201 (or Language Arts 200), or English as a Second Language 261, 262 and 263.

Three hours lecture-laboratory.

An intermediate-level study of the common practices used in jazz and blues music. Guitar styles from the 1940's to the present will be examined through the use of recording and written examples. Chord voicing, scales, right hand picking techniques, and development of solo skills in these styles will be emphasized.

MUSI 77 Special Projects in Music 1 Unit

MUSI 77X 2 Units
MUSI 77Y 3 Units

(Formerly Music 40, 40X, and 40Y.)

Prerequisite: Music major.

Three hours laboratory per week for each unit of credit.

(Any combination of Music 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 advanced projects in theory, composition, arranging, performance, history and literature.

MUSI 202 Music Reading 1 Unit

Credit course – Does not apply to De Anza Associate degree.

(Formerly Music 102.)

(Required for music majors not qualifying on the Music Placement Exam.)

Two hours lecture-laboratory.

Learning to read music by continuous supervised practice. Limited reference to theoretical matters; concentration on reading music notation at sight and on development of aural skills. For students with no previous musical experience. Enrollment in one of the following beginning performance classes is recommended: Music 8, 12A, 13A, 14A, 23, 24, 46, 47, or 51. Does not fulfill any music major requirements.

MUSI 500 Studio Practice 0 Units

Corequisite: Music 500 students must also enroll in an art production or skills course.

One and one-half hours laboratory.

(No limit on repeatability for 0 unit classes.)

No grade (NG) course.

Supervised use of individual production facilities.

Naval Science

(Navy Reserve Officers Training Corps)

For information on Naval ROTC courses, please see Military Studies in this catalog/schedule.

Nursing

The following are the nursing education options and career paths for students at De Anza College. For specific program requirements, see Career and Curriculum Certificates and Degrees located elsewhere in this catalog.

Registered Nursing Program
L.V.N. Transition to R.N. Nursing Program
Continuing Education for Nurses
Refresher Program for Registered Nurses

Applications for the licensure programs (R.N., or L.V.N. Transition) are available after successfully completing the following: Nursing 50, the required prerequisites for the programs with a Grade point Average (GPA) of 3.0 or higher, and admission through the selection process for entrance. The curriculum of these programs is designed to prepare individuals for beginning professional nursing practice and to define and understand the legal scope of practice within each of the licensed nursing disciplines. The programs promote success in the ability to practice nursing effectively together as a professional team.

See [The Department of Nursing Student Handbook](#) for specific policies regarding admission, challenge, progression, and retention in the programs. The majority of courses are scheduled in the daytime. Generally, the nursing programs are not scheduled during the summer session. Costs of uniforms, books, malpractice insurance and miscellaneous supplies are estimated at \$4000 for the program. In addition, each student is responsible for his/her own transportation to the clinical agencies.

Registered Nursing Program

Associated Degree Nursing Program is accredited by the California Board of Registered Nursing. The R.N. graduate is eligible to take the California State Board Examination for licensing (NCLEX - R.N.) Students are admitted to this program during the fall, winter, and spring quarters. The majority of courses are scheduled in the daytime. Generally, the R.N. Program is not scheduled in the summer session. The program, once admitted, (**not including** prerequisites) is six quarters in length.

L.V.N. Transition to the Registered Nursing Program

(Current California L.V.N. license is required.) The L.V.N. Transition to the R.N. graduate is eligible to take the California State Board Examination for licensing (NCLEX - R.N.) Students are admitted throughout the year as advanced placements. The majority of courses are scheduled in the daytime. Generally, the program is not scheduled in the summer session. The program, once admitted, (**not including** prerequisites) is at least three quarters in length.

Advanced Placement for Students with Prior Nursing Education

Students are admitted in advanced placement during the fall, winter, or spring quarter on a space available basis only. Placement depends on prior nursing education.

NURS 50 Career Opportunities in Nursing 2 Units

Advisory: English Writing 200A and Reading 201 (or Language Arts 200), or English as a Second Language 261, 262 and 263.

Two hours lecture.

Pass-No Pass (P-NP) course.

Careers in the health field with emphasis on education and practice. Required course to obtain an application for De Anza's Nursing Program except for Licensed Vocational Nurses.

NURS 54IL Medical/Surgical II (Care of the Older Adult) - Clinical 5 Units

Prerequisite: Nursing 54EL, 54ER, 54FL, 54FR, 54GL, and 54GR, all courses with a grade of C or better.

Corequisite: Nursing 54IL students must also enroll in Nursing 54IR and 54JR.

Fifteen hours laboratory.

Pass-No Pass (P-NP) course.

Utilization of the nursing process within the framework of Orem's model of self-care in relation to the gerontologic client and the client with chronic self-care deficits. Emphasis is on the clinical nursing care of the older adult who is experiencing the normal process of aging as well as the older adult experiencing a health deviation. Clinical objectives are met through experiences in a variety of settings such as long term care nursing facilities, medical-surgical units in acute care settings, adult community centers, and simulated laboratory settings. This course and its theory component (Nursing 54IR) must be taken concurrently. Failure of either requires both to be retaken. Critical thinking and problem solving skills will be utilized in the application of theoretical concepts with consideration for the Registered Nurse's specific scope of practice.

NURS 54IR Medical/Surgical II (Care of the Older Adult) 4 Units

Prerequisite: Nursing 54EL, 54ER, 54FL, 54FR, 54GL, and 54GR, all courses with a grade of C or better.

Corequisite: Nursing 54IR students must also enroll in Nursing 54IL and 54JR.

Four hours lecture.

Utilization of the nursing process within the framework of Orem's model of self-care in relation to the gerontological client and the client with chronic self-care deficits. Emphasis is on the study of the older adult who is experiencing the normal process of aging as well as the older adult experiencing a health deviation. Critical thinking and problem solving will be employed through group exercises and independent study with consideration for the Registered Nurse's scope of practice. This course and its clinical component (Nursing 54IL) must be taken concurrently. Failure of either requires both to be retaken.

NURS 54JR Advanced Medical-Surgical Concepts 2 Units*Prerequisite: Nursing 54EL, 54ER, 54FL, 54FR, 54GL and GR.**Corequisite: Nursing 54JR students must also enroll in Nursing 54IR and 54IL.**Two hours lecture.*

Health deviations presented are encountered in the adult population. Topics include self-care deficits related to air, water, food, activity and rest, solitude/social interaction, elimination, prevention of hazards, and normalcy. Critical thinking and problem solving skills will be employed through group exercises and independent study with consideration for the Registered Nurse's specific scope of practice.

NURS 54K Psychiatric/Mental Health Nursing (Theory) 4 Units*Prerequisite: Nursing 54IL, 54IR, and 54JR, all courses with a grade of C or better.**Corequisite: Nursing 54K students must also enroll in Nursing 54KL.**Four hours lecture.*

Utilization of the Nursing Process in meeting client's self-care deficits with an emphasis on the biopsychosocial needs of individuals across the life span who experience acute and chronic psychopathology. Theories of psychiatric/mental health nursing will be taught in concert with nursing care of individuals undergoing treatment in a variety of behavioral healthcare settings. Theory and clinical components must be taken concurrently. Failure of either component requires both courses to be retaken.

NURS 54KL Psychiatric/Mental Health Nursing (Clinical) 5 Units*Prerequisite: Nursing 54IL, 54IR, and 54JR, all courses with a grade of C or better.**Corequisite: Nursing 54KL students must also enroll in Nursing 54K.**Fifteen hours laboratory.**Pass-No Pass (P-NP) course.*

Application of theories of psychiatric/mental health nursing. The nursing process is used in providing care for individuals undergoing treatment in a variety of behavioral health care settings including hospitals, clinics and community agencies. Clinical and theory (Nursing 54K) components must be taken concurrently. Failure of either component requires both courses to be retaken.

NURS 54L Leadership/Management in Nursing 2 Units*Prerequisite: Nursing 54K and 54KL, all courses with a grade of C or better.**Corequisite: Nursing 54L students must also enroll in Nursing 54LL.**Two hours lecture.*

Leadership/Management in Nursing is a quarter long course designed to prepare the Registered Nursing student to function as a graduate nurse. Focus includes the managerial/leadership role, interdisciplinary practice, legal challenges of clinical practice, and trends within the nursing profession.

NURS 54LL Leadership/Management in Nursing (Clinical) 5 Units*Prerequisite: Nursing 54K and 54KL, all courses with a grade of C or better.**Corequisite: Nursing 54LL students must also enroll in Nursing 54L.**Fifteen hours laboratory.**Pass-No Pass (P-NP) course.*

This is the clinical component to the Leadership/Management in Nursing course and is to be taken concurrently. This course, the Prelicensure Preceptorship, is designed to prepare the student to function as a graduate nurse. Students will provide nursing care for patients under the guidance of a registered nurse working in the community, supervised by the faculty liaison. The student will work on either the day, evening, or night shift, depending on the schedule of the assigned preceptor.

NURS 56 Nursing Special Projects 1/2 Unit**NURS 56X 1 Unit****NURS 56Y 2 Units****NURS 56Z 3 Units***Prerequisite: Consent of Instructor.**Three hours laboratory for each unit of credit.**(Any combination of Nursing 56, 56X, 56Y, and 56Z 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.*

Selected topics in nursing theory and/or clinical experience.

NURS 81 Fundamental Nursing (Non Acute/Sub Acute Care) 4 Units*Prerequisite: Nursing 50; Biology 26, 40A, 40B, 40C and 45; English Writing 1A or English as a Second Language 5; Mathematics 105 or 114, or satisfactory score on placement test; Psychology 1 and 14; Speech 1 (or 10).**Corequisite: Nursing 81 students must also enroll in Nursing 81L and 81P.**Four hours lecture.*

Introduction to the foundation for entry into the field of nursing. Orem's model of self-care is used as the basis to study the health/illness continuum, the legal and ethical issues, safety principles, and the process of coping related to nursing practice. Goal-directed therapeutic communication techniques, principles of medical and surgical asepsis, and safe administration of medications by non-parenteral routes will be introduced. The nursing process is also a basis for all client interactions. Beginning teaching/learning principles will be explored to assist the client toward self-care.

NURS 81L Fundamental Nursing (Non Acute/ Sub Acute Care Clinical) 5 Units*Prerequisite: Nursing 50; Biology 26, 40A, 40B, 40C and 45; English Writing 1A or English as a Second Language 5; Mathematics 105 or 114, or satisfactory score on placement test; Psychology 1 and 14; Speech 1 (or 10).**Corequisite: Nursing 81L students must also enroll in Nursing 81 and 81P.**Fifteen hours laboratory.**Pass-No Pass (P-NP) course.*

Clinical objectives will be met in the campus skill laboratory and in skilled and sub acute nursing facilities to apply theory concepts. Fundamental nursing care concepts will be introduced. Students will have "hands-on" experiences with all basic concepts presented.

NURS 81N CNA Transition (Non Acute/ Sub Acute Care) 3 Units*Prerequisite: Nursing 50; English Writing 1A or English as a Second Language 5; Mathematics 114, or satisfactory score on placement test; Biology 26, 40A, 40B, 40C and 45; Psychology 1 and 14; Speech 10; current California Nursing Assistant Certification.**Corequisite: Nursing 81N students must also enroll in 81NL and 81P.**Three hours lecture.*

A transition course which provides a higher level entry into the nursing program for the Certified Nursing Assistant who has basic bedside nursing skills but lacks additional nursing requirements. The nursing process incorporating Orem's model of self-care, and teaching/learning principles are presented along with concepts of non-parenteral medication administration.

NURS 81NL CNA Transition (Non-Acute/ Sub Acute Care Clinical) 2 Units*Prerequisite: Nursing 50; English Writing 1A or English as a Second Language 5; Mathematics 105 or 114, or satisfactory score on placement test; Biology 26, 40A, 40B, 40C and 45; Psychology 1 and 14; Speech 10; current California Nursing Assistant Certification.**Corequisite: Nursing 81NL students must also enroll on 81N and 81P.**Six hours laboratory.**Pass-No Pass (P-NP) course.*

A transition course which provides a higher level entry into the nursing program for the Certified Nursing Assistant who has basic bedside nursing skills but lacks additional nursing requirements. The nursing process and teaching/learning principles are applied along with administration of non-parenteral medications.

NURS 81P Pharmacology I 1 1/2 Units*(Open to non-nursing students as well.)**Prerequisite: Nursing 50; Biology 26, 40A, 40B, 40C and 45; English Writing 1A or English as a Second Language 5; Mathematics 105 or 114, or satisfactory score on placement test; Psychology 1 and 14; Speech 1 (or 10).**Corequisite: Nursing 81P students must also enroll in Nursing 81 and 81L, or Nursing 81N and 81NL.**One and one-half hours lecture.*

Pharmacology I provides the basic foundation required for entry in the field of nursing. Legal/ethical issues and safety principles will be stressed throughout this course as an integral part of nursing practice. Beginning teaching/learning principles will be explored to assist the student to use effective techniques in self-care. The Nursing Process is used as a basis for all client interactions and Orem's model is integrated into this process.

NURS 82 Acute Fundamentals/Medical Surgical I 4 Units*Prerequisite: Nursing 81 and 81L; or 81N and 81NL; and Nursing 81P, all courses with a grade of C or better.**Corequisite: Nursing 82 students must also enroll in Nursing 82L and 82P.**Fifteen hours laboratory.**Pass-No Pass (P-NP) course.*

Physical and psycho social, universal, developmental, and health deviation self-care requisites are addressed by utilization of the nursing process and Orem's model of self-care. Therapeutic communication techniques and teaching/learning principles are applied in assisting the medical/surgical client to move toward self-care. The student will be introduced to principles of safe administration of medications by parenteral routes, fluid and electrolyte theory application, and preparation and administration of intravenous infusions. Clinical assignments will focus on the perioperative client as well as medical health deviations discussed in theory class.

- NURS 82L Acute Fundamentals/Medical Surgical I (Clinical) 5 Units**
Prerequisite: Nursing 81 and 81L; or 81N and 81NL; and Nursing 81P, all courses with a grade of C or better.
Corequisite: Nursing 82L students must also enroll in Nursing 82 and 82P.
Fifteen hours laboratory.
Pass-No Pass (P-NP) course.
 Physical and psycho social, universal, developmental, and health deviation self-care requisites are addressed by utilization of the nursing process and Orem's model of self-care. Therapeutic communication techniques and teaching/learning principles are applied in assisting the medical/surgical client to move toward self-care. The student will be introduced to principles of safe administration of medications by parenteral routes, fluid and electrolyte theory application, and preparation and administration of intravenous infusions. Clinical assignments will focus on the perioperative client as well as medical health deviations discussed in theory class.
- NURS 82P Pharmacology II 1 1/2 Units**
(Open to non-nursing students with instructor approval.)
Prerequisite: Nursing 81 and 81L; or Nursing 81N and 81NL; and Nursing 81P, all courses with a grade of C or better.
Corequisite: Nursing 82P students must also enroll in Nursing 82 and 82L.
One and one-half hours lecture.
 Pharmacology II provides students with a sound basis of pharmacology for entry into acute care nursing. Legal/ethical issues and safety principles will be stressed as an integral part of nursing practice. Teaching/learning principles will be expanded to assist the student in effective techniques in self care. Orem's model is used as a basis for all client interactions and is integrated into this process. The student will also incorporate principles of medical/surgical asepsis in the safe administration of medications by nonparenteral and parenteral routes with emphasis on parenteral routes.
- NURS 83 Perinatal Nursing 2 Units**
Prerequisite: Nursing 82, 82L, and 82P, all courses with a grade of C or better.
Corequisite: Nursing 83 students must also enroll in Nursing 83A, 83AL, 83L, 83P, and 83PL.
Two hours lecture.
 Utilization of the Nursing Process and incorporation of Orem's model of self-care in meeting universal developmental health deviation self-care requisites of perinatal client and family. Focus is on the physical and psycho social needs of the perinatal client, including the needs of the family unit. Critical thinking and problem solving skills will be employed through group exercises and independent study with consideration for the Registered Nurse's specific scope of practice. Theory and clinical components are to be taken concurrently. Failure of either component requires both courses to be retaken.
- NURS 83A Pediatric Nursing 2 Units**
Prerequisite: Nursing 82, 82L, and 82P, all courses with a grade of C or better.
Corequisite: Nursing 83A students must also enroll in Nursing 83, 83AL, 83L, 83P, and 83PL.
Two hours lecture.
 Introduction to the nursing care of children. Orem's model of self-care will be used as a basis to study the health/illness continuum as it applies to children and their families. The nursing process will be integrated throughout the course as a primary tool for delivering nursing care to children. Theory and clinical must be taken concurrently. Failure of either requires both to be retaken. Critical thinking and problem solving skills will be employed through group exercises and independent study with consideration for the Registered Nurse's specific scope of practice.
- NURS 83AL Pediatric Nursing (Clinical) 2 1/2 Units**
Prerequisite: Nursing 82, 82L, and 82P, all courses with a grade of C or better.
Corequisite: Nursing 83AL students must also enroll in Nursing 83, 83A, 83L, 83P, and 83PL.
Seven and one-half hours laboratory.
Pass-No Pass (P-NP) course.
 Clinical objectives will be met in the campus skills laboratory, acute care facilities, and numerous community agencies to apply theory concepts. Theory and clinical must be taken concurrently. Failure of either requires both to be retaken. Critical thinking and problem solving skills will be utilized in the application of theoretical concepts with consideration for the Registered Nurse's scope of practice.
- NURS 83L Perinatal Nursing (Clinical) 2 1/2 Units**
Prerequisite: Nursing 82, 82L, and 82P, all courses with a grade of C or better.
Corequisite: Nursing 83L students must also enroll in Nursing 83, 83A, 83AL, 83P, and 83PL.
Seven and one-half hours laboratory.
Pass-No Pass (P-NP) course.
 Clinical objectives will be achieved through student participation in nursing laboratory exercises, in acute hospital settings, and in selected community-based Women's Health Clinics. Assessment skills will be demonstrated by the instructor and practiced by the student before "hands-on" implementation in the various clinical settings. Theory and clinical components are to be taken concurrently. Failure of either component requires both courses to be retaken.
- NURS 83P Pharmacology III 1 1/2 Units**
(Open to non-nursing students with instructor approval.)
Prerequisite: Nursing 82, 82L, and 82P, all courses with a grade of C or better.
Corequisite: Nursing 83P students must also enroll in Nursing 83, 83A, 83AL, 83L, and 83PL.
One and one-half hours lecture.
 Pharmacology III focuses on pharmacology related to the maternal and child population. Legal/ethical issues and safety principles will be stressed as an integral part of nursing practice. Teaching/learning principles with regard to medication administration will be included. Concepts on venipuncture will be presented.
- NURS 83PL Pharmacology III Laboratory 1/2 Unit**
Prerequisite: Nursing 82, 82L, and 82P, all courses with a grade of C or better.
Corequisite: Nursing 83PL students must also enroll in Nursing 83, 83A, 83AL, 83L, and 83P.
One and one-half hours laboratory.
Pass-No Pass (P-NP) course.
 Pharmacology III Laboratory objectives will be met in the campus skills laboratory. The focus of the course is to provide the student pharmacology skill application with emphasis on maternal and child populations. Practice in venipuncture and blood withdrawal will also be provided. Concepts of advanced vascular access, chemotherapy and parenteral nutrition will be addressed.
- NURS 84 Medical/Surgical II (Care of the Older Adult) 4 Units**
Prerequisite: Nursing 83, 83A, 83AL, 83L, 83P, and 83PL, all courses with a grade of C or better.
Corequisite: Nursing 84 students must also enroll in Nursing 84C and 84L.
Four hours lecture.
 Utilization of the nursing process within the framework of Orem's model of self-care in relation to the gerontological client and the client with chronic self-care deficits. Emphasis is on the study of the older adult who is experiencing the normal process of aging as well as the older adult experiencing a health deviation. Critical thinking and problem solving will be employed through group exercises and independent study with consideration for the Registered Nurse's scope of practice. This course and its clinical component (Nursing 541L) must be taken concurrently. Failure of either requires both to be retaken.
- NURS 84C Critical Thinking in Nursing 2 Units**
Prerequisite: Nursing 83, 83A, 83AL, 83L, 83P, and 83PL, all courses with a grade of C or better.
Corequisite: Nursing 84C students must also enroll in Nursing 84 and 84L.
Two hours lecture.
 Designed to assist the nurse in developing critical thinking skills to facilitate decision making and effective clinical judgment. The nursing process will be utilized as a mechanism in developing coherent and logical thinking through the use of scenarios, debates, group and written assignments. Critical thinking and problem solving skills will be employed through group exercises and independent study with consideration for the Registered Nurse's specific scope of practice.
- NURS 84L Medical/Surgical II (Care of the Older Adult) - Clinical 5 Units**
Prerequisite: Nursing 83, 83A, 83AL, 83L, 83P, and 83PL, all courses with a grade of C or better.
Corequisite: Nursing 84L students must also enroll in Nursing 84 and 84C.
Fifteen hours laboratory.
Pass-No Pass (P-NP) course.
 Utilization of the nursing process within the framework of Orem's model of self-care in relation to the gerontologic client and the client with chronic self-care deficits. Emphasis is on the clinical nursing care of the older adult who is experiencing the normal process of aging as well as the older adult experiencing a health deviation. Clinical objectives are met through experiences in a variety of settings such as long term care nursing facilities, medical-surgical units in acute care settings, adult community centers, and simulated laboratory settings. This course and its theory component (Nursing 84) must be taken concurrently. Failure of either requires both to be retaken. Critical thinking and problem solving skills will be utilized in the application of theoretical concepts with consideration for the Registered Nurse's specific scope of practice.
- NURS 85 Advanced Medical-Surgical Concepts 2 Units**
Prerequisite: Nursing 84, 84C, and 84L.
Corequisite: Nursing 85 students must also enroll in Nursing 85A, 85AL, and 85L.
Two hours lecture.
 Health deviations presented are encountered in the adult population. Topics include self-care deficits related to air, water, food, activity and rest, solitude/social interaction, elimination, prevention of hazards, and normalcy. Critical thinking and problem solving skills will be employed through group exercises and independent study with consideration for the Registered Nurse's specific scope of practice.

N **NURS 85A Psychiatric/Mental Health Nursing (Theory) 4 Units**

Prerequisite: Nursing 84, 84C, and 84L, all courses with a grade of C or better.

Corequisite: Nursing 85A students must also enroll in Nursing 85, 85AL, and 85L.

Four hours lecture.

Utilization of the Nursing Process in meeting client's self-care deficits with an emphasis on the biopsychosocial needs of individuals across the life span who experience acute and chronic psychopathology. Theories of psychiatric/mental health nursing will be taught in concert with nursing care of individuals undergoing treatment in a variety of behavioral healthcare settings. Theory and clinical components must be taken concurrently. Failure of either component requires both courses to be retaken.

NURS 85AL Psychiatric/Mental Health Nursing (Clinical) 5 Units

Prerequisite: Nursing 84, 84C, and 84L, all courses with a grade of C or better.

Corequisite: Nursing 85AL students must also enroll in Nursing 85, 85A, and 85L.

Fifteen hours laboratory.

Pass-No Pass (P-NP) course.

Application of theories of psychiatric/mental health nursing. The nursing process is used in providing care for individuals undergoing treatment in a variety of behavioral health care settings including hospitals, clinics and community agencies. Clinical and theory (Nursing 85A) components must be taken concurrently. Failure of either component requires both courses to be retaken.

NURS 85L Advanced Medical-Surgical Clinical 2 1/2 Units

Prerequisite: Nursing 84, 84C, and 84L, all courses with a grade of C or better.

Corequisite: Nursing 85L students must also enroll in Nursing 85, 85A, and 85AL.

Seven and one-half hours laboratory.

Pass-No Pass (P-NP) course.

Application of concepts learned in the theory class will occur in acute care settings. Students will be working with clients demonstrating acute health deviations. The nursing process and Orem's conceptual model will be utilized in caring for unstable clients on a medical-surgical unit.

NURS 86 Leadership/Management in Nursing 2 Units

Prerequisite: Nursing 85, 85A, 85AL, and 85L, all courses with a grade of C or better.

Corequisite: Nursing 86 students must also enroll in Nursing 86L.

Two hours lecture.

Leadership/Management in Nursing is a quarter long course designed to prepare the Registered Nursing student to function as a graduate nurse. Focus includes the managerial/leadership role, interdisciplinary practice, legal challenges of clinical practice, and trends within the nursing profession.

NURS 86L Leadership/Management in Nursing (Clinical) 5 Units

Prerequisite: Nursing 85, 85A, 85AL, and 85L, all courses with a grade of C or better.

Corequisite: Nursing 86L students must also enroll in Nursing 86.

Fifteen hours laboratory.

Pass-No Pass (P-NP) course.

This is the clinical component to the Leadership/Management in Nursing course and is to be taken concurrently. This course, the Prelicensure Preceptorship, is designed to prepare the student to function as a graduate nurse. Students will provide nursing care for patients under the guidance of a registered nurse working in the community, supervised by the faculty liaison. The student will work on either the day, evening, or night shift, depending on the schedule of the assigned preceptor.

NURS 110A Coronary Care Nursing Concepts 3 1/2 Units

(Formerly Nursing 79A.)

Prerequisite: Professional nurse or nursing student.

Three and one-half hours lecture.

Advanced concepts of coronary care nursing: cardiovascular anatomy and physiology, the diagnosis of arrhythmias and the comprehensive care of the patient with myocardial infarction or congestive heart failure, with consideration given to the psychosocial, cultural values and beliefs, spiritual and educational needs.

NURS 110B Critical Cardiovascular Nursing Concepts 1 Unit

(Formerly Nursing 79G.)

Prerequisite: Professional nurse or nursing student.

One hour lecture.

Critical care nursing: medical and surgical management and treatment for cardiovascular disease and valvular dysfunctions, and use of the intra-aortic balloon pump, arthrorectomy, lasers, stents and bypass grafting.

NURS 110C Critical Neurological Nursing Concepts 1 1/2 Units

(Formerly Nursing 79J.)

Prerequisite: Professional nurse or nursing student.

One and one-half hours lecture.

Critical care nursing: related anatomy, physiology and pathophysiology for assessment, treatment and care for patients with critical neurological problems

including neurological assessment, intracranial pressure measurement, and care of the cerebrovascular impaired patient.

NURS 110D Critical Respiratory Nursing Concepts 1 1/2 Units

(Formerly Nursing 79K.)

Prerequisite: Professional nurse or nursing student.

One and one-half hours lecture.

Critical care nursing: anatomy, physiology, and pathophysiology of the pulmonary system; arterial blood gas interpretation and pharmacological agents.

NURS 110E Seminar On Liver Disease, Gastrointestinal Bleeding, and Disseminated Intravascular Clotting 1/2 Unit

(Formerly Nursing 79M.)

Prerequisite: Professional nurse or nursing student.

One-half hour lecture.

Introduces the critical care nurse to the pathophysiology of liver disease, gastrointestinal bleeding and disseminated intravascular coagulation. The Nursing Process will emphasize the critical care planning, diagnoses, interventions and evaluations necessary to care for acutely ill clients. Current modalities of treatment will be described including: hepatic shunting, liver transplantation and liver assist devices. The social, psychological and cultural aspects of care for the client and family will be evaluated.

NURS 110F Critical Endocrinology Concepts 1/2 Unit

(Formerly Nursing 79N.)

Prerequisite: Professional nurse or nursing student.

One-half hour lecture.

Disorders of the pancreas, thyroid and adrenal glands with an emphasis on diabetic emergencies will be covered. The pathophysiology associated with these organs is included. Emphasis is placed on the development of critical thinking skills in the nursing care management.

NURS 110G Critical Renal Nursing Concepts 1 Unit

(Formerly Nursing 79P.)

Prerequisite: Professional nurse or nursing student.

One hour lecture.

Critical care nursing: renal concepts; assessment, care and management of patients with renal failure. Critical thinking skills will be used to employ the nursing process in the development of a comprehensive nursing care plan.

NURS 110H Hemodynamic Monitoring 1 Unit

(Formerly Nursing 79Q.)

Prerequisite: Professional nurse or nursing student.

One hour lecture.

Critical care nursing. Concepts and techniques for continuous bedside cardiopulmonary assessment with emphasis on cardiac waveforms and various pressure measurements. In addition, utilization of the nursing process will be integrated to prepare the nurse to competently care for the patient requiring hemodynamic management at the bedside.

NURS 110I Seminar in Shock (Macroshock) 1/2 Unit

(Formerly Nursing 79R.)

Prerequisite: Professional nurse or nursing student.

One-half hour lecture.

Utilization of the Nursing Process and all available resources in preparation of the nurse to competently care for the critically ill shock patient.

NURS 110J Seminar on Shock (Multi-System Organ Dysfunction Syndrome) 1/2 Unit

(Formerly Nursing 79S.)

Prerequisite: Professional nurse or nursing student.

One-half hour lecture.

Utilization of the Nursing Process and all available resources in preparation of the nurse to competently care for the critically ill shock patient who is experiencing multi-system organ dysfunction.

NURS 110K Trauma Nursing 1 Unit

(Formerly Nursing 77.)

Prerequisite: Professional nurse or nursing student.

One hour lecture.

(May be taken twice for credit.)

Trauma nursing: assessment, management, diagnostic procedures, nursing diagnosis and care of the trauma center patient.

NURS 125C Advanced Medical Surgical Nursing Practicum II 2 1/2 Units

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

Prerequisite: Admission to the RN Refresher Program.

Seven and one-half hours laboratory.

(May be taken six times for credit.)

Pass-No Pass (P-NP) course.

A medical-surgical nursing practicum in acute or extended care settings.

NURS 150 Nursing Laboratory Skills 1/2 Unit
NURS 150W 1 Unit
NURS 150X 1 1/2 Units
NURS 150Y 2 Units
Corequisite: Nursing 150, 150W,X,Y students must also be in the Associate Degree Nursing Program.
Eighteen hours laboratory per quarter for each one-half unit of credit. (Any combination of Nursing 150, 150W, 150X, and 150Y may be taken for a maximum of four units.)
Pass-No Pass (P-NP) course.
 Nursing skills practice in campus laboratory setting.

NURS 202 Review of Nursing Concepts 1/2 Unit
NURS 202X 1 Unit
NURS 202Y 2 Units
NURS 202Z 3 Units
(Formerly Nursing 100.)
Credit course - Does not apply to De Anza Associate degree.
Prerequisite: Nursing 202, 202X,Y,Z students must also be a Licensed or graduate nurse.
Three hours laboratory for each unit of credit. (Any combination of Nursing 202, 202X, 202Y, and 202Z may be taken for a maximum of six units.)
Pass-No Pass (P-NP) course.

Independent study course which is designed for the nurse who is seeking a review or update of information related to theoretical nursing concepts in the areas of gerontology, medical surgical, pediatric, perinatal, and psychiatric nursing. Critical thinking skills are employed in making nursing decisions, and effective clinical judgments.

NURS 500 Nursing Laboratory Practice 0 Units
Corequisite: Nursing 500 students must also enroll in nursing programs or allied health programs or skills courses.
Hours determined by student attendance. (No limit on repeatability for 0 unit classes.)
No grade (NG) course.
 Supervised use of laboratory facilities.

Nutrition

NUTR 10 Contemporary Nutrition 4 Units
(Formerly Nutrition 39.)
(See general education pages for the requirement this course meets.)
Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173 ; Mathematics 200 or 210.
Four hours lecture.
 Physiological, psychological and economic aspects of obtaining an adequate diet through the life cycle. Relationship of nutrients to health and physical fitness. Evaluation of current nutritional issues and controversies.
 (CAN FCS 2)

NUTR 62 Nutrition and Athletic Performance 2 Units
Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173.
Two hours lecture.
 Principles of sports nutrition. Suggested diets for strength training, endurance activities and weight control. Use of popular ergogenic aids.

NUTR 62G Dieting (Sifting Fact from Fiction) 1/2 Unit
Advisory: Nutrition 10 or 62.
One-half hour lecture.
 Causes of obesity, evaluation of popular weight control diets and programs and effective methods of weight loss.

Paralegal Program

PARA 3 Concepts of Criminal Law (CP 2) 5 Units
Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173.
(Also listed as Administration of Justice 3 and Political Science 13. Student may enroll in only one department for credit.)
Four hours lecture, three hours directed research.
 Historical development, philosophy of law and constitutional provisions, definitions, classification of crime, and their application to the system of administration of justice; legal research, study of case law, methodology and concepts of law as a social force.

PARA 11 Federal Courts and Constitutional Law 4 Units
Advisory: English Writing 1A or English as a Second Language 5.
(Also listed as Administration of Justice 11 and Political Science 11. Student may enroll in only one department for credit.)
Four hours lecture.

Federal court procedure and the impact of U.S. Constitutional law on federal and state law. Read and analyze the Constitution. Effect of U.S. Supreme Court cases on current constitutional interpretation.

PARA 18 Business Law I 5 Units
Prerequisite: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173.
Advisory: Business 10.
(Also listed as Business 18. Student may enroll in either department, but not both, for credit.)
Five hours lecture.
 The American legal system and laws applicable to business emphasizing contract and sales laws, the impact of the legal system on business, and ethical considerations in the business environment.

PARA 52A Legal Aspects of Real Estate in California I 4 Units
Advisory: Real Estate 50.
(Also listed as Real Estate 52A. Student may enroll in either department, but not both, for credit.)
Four hours lecture.
 California real property laws with emphasis on their practical application. Sources of real estate law; classes of property; fixtures; easements; estates or interest in real property; contracts of sale; covenants; conditions; and restrictions.

PARA 54 Youth and the Law 4 Units
Advisory: English Writing 200 and Reading 201 (or Language Arts 200), or English as a Second Language 261, 262 and 263.
(Also listed as Sociology 54 and Administration of Justice 54. Student may enroll in only one department, for credit.)
Four hours lecture.
 The organization, functions, and jurisdiction of juvenile agencies; the processing and detention of juveniles; juvenile case disposition; juvenile statutes and court procedure.

PARA 64 Paralegal Internship 1 Unit
PARA 64X 2 Units
PARA 64Y 3 Units
PARA 64Z 4 Units
Advisory: Paralegal Studies 74A, 75, and 94; or the consent of the instructor.
Four hours per week per unit of supervised internship in an authorized office or agency.
(Any combination of Paralegal Studies 64, 64X, 64Y and 64Z may be taken up to six times, not to exceed 18 units, as long as the topics/projects are different each time.)
 Program of work experience and study in law, paralegal, or legal research under the supervision of the instructor and agency personnel.

PARA 65 Current Paralegal Topics 1/2 Unit
PARA 65W 1 Unit
PARA 65X 2 Units
PARA 65Y 3 Units
PARA 65Z 4 Units
Advisory: English Writing 1A or English as a Second Language 5. Background or experience appropriate to topic or consent of instructor.
One hour lecture for each unit of credit.
(Any combination of Paralegal Studies 65, 65W, 65X, 65Y, and 65Z may be taken up to six times, not to exceed 18 units, as long as the topics/projects are different each time.)
 Current developments in the substantive law in an area of legal practice; current developments in procedural law in that area of legal practice; current developments in legal forms used in that area of legal practice; role of paralegal in substantive and procedural law in that area of legal practice.

PARA 69 Administration of Justice Field Trips 3 Units
Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173.
Six hours lecture-laboratory.
(May be taken up to six times, not to exceed 18 units, as long as the topics/projects are different each time.)
 A survey of current conditions in the paralegal field or visits to adult or juvenile detention and correctional facilities in Northern California.

PARA 74A Interviewing, Interrogation and Crisis Intervention 4 Units
Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173.
(Also listed as Administration of Justice 74A and Psychology 74A. Student may enroll in only one department for credit.)
Four hours lecture.
 Theories, principles and strategies of tactical and interpersonal communication necessary to interview victims, witnesses, and suspects; crisis intervention strategies for victims and witnesses of crime; communication with individuals from diverse backgrounds with consideration to race, ethnicity, gender, age and special needs.

- PARA 75 Principles and Procedures of the Justice System (CP 6) 4 Units**
(Formerly Paralegal 2.)
Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173.
(Also listed as Administration of Justice 75, and Political Science 75. Student may enroll in only one department, for credit.)
Four hours lecture.
 Procedures followed by law enforcement and courts in criminal cases; constitutional principles governing those procedures.
- PARA 84 Trial Preparation 4 Units**
Prerequisite: Paralegal 94 or Paralegal 95.
Advisory: English Writing 1A or English as a Second Language 5; and Paralegal 97A.
Four hours lecture.
 Role of paralegal in preparing a case for trial including pre-trial planning, evidence gathering and case analysis.
- PARA 85 Intellectual Property Law 4 Units**
Prerequisite: Paralegal 94 or Paralegal 95.
Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173.
Four hours lecture.
 Overview of the law of intellectual property, including trade secrets, trademarks, patents and copyrights and examination of the role of the paralegal in this area.
- PARA 86 Legal Analysis 4 Units**
Advisory: English Writing 1A or English as a Second Language 5.
Four hours lecture.
 Principles of legal analysis with an emphasis on analysis of case law; detailed examination of written case opinions; methods of interpreting statutory law; development of legal arguments based on case law and statutory law.
- PARA 87 Personal Injury and Tort Litigation 4 Units**
Prerequisite: Paralegal 94 or 95, or professional experience appropriate to the topic.
Advisory: English Writing 1A or English as a Second Language 5.
Four hours lecture.
 Substantive tort law emphasizing concepts applicable to automobile accident cases, product liability cases, premises liability cases and malpractice cases; insurance law affecting personal injury litigation; basic medical terminology in personal injury litigation; procedural rules and practices related to personal injury litigation in California with an emphasis on the role of the paralegal.
- PARA 88 The Paralegal and Professional Responsibility 2 Units**
Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173 ; and English as a Second Language 226.
Two hours lecture.
 Examination of the role of the paralegal in the legal system. Ethical rules and guidelines governing legal professionals.
- PARA 89 Landlord Tenant Law 4 Units**
Prerequisite: Paralegal 94 or 95, or professional experience appropriate to the topic.
Advisory: English Writing 1A or English as a Second Language 5.
Four hours lecture.
 California law relating to creation of landlord/tenant relationship; legal rights of landlords; legal rights of tenants; eviction proceedings.
- PARA 90A Legal Aspects of Evidence (CP 4) 4 Units**
Advisory: English Writing 200 and Reading 201 (or Language Arts 200), or English as a Second Language 261, 262 and 263.
(Also listed as Administration of Justice 90A. Student may enroll in either department, but not both, for credit.)
Four hours lecture.
 The origin, development, and content of the rules of evidence; kinds and degrees of evidence and rules governing admissibility of evidence.
- PARA 91A California Family Law 4 Units**
Prerequisite: Paralegal 94 or 95, or professional experience appropriate to the topic.
Advisory: English Writing 1A or English as a Second Language 5.
Four hours lecture.
 Substantive and procedural aspects of family law practice in California, with emphasis on dissolution procedures.
- PARA 92A Partnerships and Corporations 4 Units**
Prerequisite: Paralegal 94 or 95, or professional experience appropriate to the topic.
Advisory: English Writing 1A or English as a Second Language 5.
Four hours lecture.
 Substantive and procedural law of basic business organizations, including sole proprietorships, partnerships, corporations and limited liability companies and partnerships.
- PARA 92B Corporate Securities Regulations 4 Units**
Prerequisite: Paralegal 94 or Paralegal 95.
Advisory: English Writing 1A or English as a Second Language 5; and Paralegal 92A.
Four hours lecture.
 Substantive laws and procedural rules and forms related to California and federal corporate securities regulations.
- PARA 93 Bankruptcy Law 4 Units**
Prerequisite: Paralegal 94 or 95, or professional experience appropriate to the topic.
Advisory: English Writing 1A or English as a Second Language 5.
Four hours lecture.
 Substantive law of bankruptcy; legal rights of debtors and creditors, procedural rules and forms of bankruptcy.
- PARA 94 Introduction to California Law 4 Units**
Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173.
Four hours lecture.
 The legal structures and legal procedures existing with the state of California; examination of the roles and duties of legal personnel in California with an emphasis on the role and duty of paralegals.
- PARA 95 Overview of American Law 4 Units**
Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173.
(Also listed as Political Science 95, and Administration of Justice 95. Student may enroll in only one department, for credit.)
Four hours lecture.
 Overview of the major substantive areas of American law: agency, contracts, constitutional law, corporations, criminal law, family law, property, torts, wills, and estates.
- PARA 96A Introduction to Legal Research and Writing 4 Units**
Prerequisite: Paralegal 94 or 95, or professional experience appropriate to the topic.
Advisory: English Writing 1A or English as a Second Language 5.
Four hours lecture.
 Organization and publication of American and California law; using print and on-line legal resources to find the law; using the law to analyze legal issues arising from factual disputes; writing a memorandum of law utilizing acceptable legal citation format.
- PARA 96B Advanced Legal Research and Writing 2 Units**
Prerequisite: Paralegal 94 or 95; Paralegal 96A.
Advisory: English Writing 1A or English as a Second Language 5.
Two hours lecture.
 Legal research using Westlaw, Lexis and the Internet; drafting a memorandum of points and authorities.
- PARA 96C Computer Assisted Legal Research and Writing 2 Units**
Prerequisite: Paralegal 94 or 95; Paralegal 96A; or professional experience appropriate to the topic.
Advisory: English Writing 1A or English as a Second Language 5.
Two hours lecture.
 Legal research using the on-line services such as LEXIS, Westlaw, Loislaw and the Internet; Drafting and preparing a legal memorandum using legal features of word-processing software.
- PARA 97A Civil Litigation Procedures 4 Units**
Prerequisite: Paralegal 94 or 95, or professional experience appropriate to the topic.
Advisory: English Writing 1A or English as a Second Language 5.
Four hours lecture.
 Substantive and procedural rules and forms for handling federal and California state civil cases through the pleading and motion phases of litigation.
- PARA 97B Advanced Civil Litigation Procedures 4 Units**
Prerequisite: Paralegal 94 or 95; Paralegal 97A; or professional experience appropriate to the topic.
Advisory: English Writing 1A or English as a Second Language 5.
Four hours lecture.
 Selected pretrial, discovery and post-trial procedures for paralegals; document preparation; judicial council form use; case analysis.

PARA 98 Drafting Wills and Trusts 4 Units

Prerequisite: Paralegal 94 or 95, or professional experience appropriate to the topic.

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

Substantive, procedural and drafting principles of wills and trusts and estate planning; role of paralegal in drafting wills and trusts, inventorying estates, and collecting data.

PARA 99 California Probate Law and Procedures 4 Units

Prerequisite: Paralegal 94 or 95, or professional experience appropriate to the topic.

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

California probate substantive law and procedures including state and federal estate tax requirements, conservatorships and community property death transfers.

Eighty to nine hundred sixty hours laboratory for the quarter.

*(May be repeated for credit.)
Pass-No Pass (P-NP) course.*

A program certified to Law Enforcement Agencies in the State of California. The program is designed to certify the completion of specifications described in the "Field Training Officer Guide" from the Commission on Peace Officer Standards and Training. Students will be assigned in a patrol car, one-on-one with a certified Field Training Officer. The program introduces a newly assigned officer to the personnel procedures, policies and purposes of the individual law enforcement agency and provides the initial formal and informal training specific to the agency and the day-to-day duties of its officers.

POST 100 Correctional Officer Basic 6 Units

Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173; Mathematics 200 or 210.

Ten hours lecture, three and one-third hours laboratory. One hundred sixty hours for the quarter.

This core training course is designed to meet the State Board of Corrections regulations for entry level training of correctional officers for adult institutions. Presents the lecture and practical application skills and knowledge to work in local adult jail facilities.

POST 101 Juvenile Counselor Core Course 6 Units

Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173; Mathematics 200 or 210.

Ten hours lecture, three and one-third hours laboratory. One hundred sixty hours for the quarter.

This course is designed to meet the California Board of Corrections requirements for entry level training of juvenile institutions staff.

POST 102 Probation Officer Core Course 7 1/2 Units

Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173; Mathematics 200 or 210.

Fourteen hours lecture, three and one-fourth hours laboratory. Two hundred eight hours for the quarter.

Provides the trainee with the basic concepts, tools, skills, etc. necessary to perform the job of probation officer within the State of California and prepare the graduate for the job. Certified by the State Board of Corrections, Training and Standards for Corrections (STC). Testing on the various topics covered will be both written and practical in nature. This course includes 208 hours of training.

POST 103 Supervisor's Update 3 Units

Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173; Mathematics 200 or 210.

Two and one-half hours lecture, four hours laboratory. Eighty hours for the quarter.

This 80 hour course includes values and ethics, role identification, leadership styles, assertive leadership, legal/liability issues, employee performance appraisal, counseling, discipline, employee relations, administrative support, press relations, planning and organizing, communications, report review, investigations, stress and the transition. This course will be updated regularly for currency according to Standards and Training for Corrections.

POST 104 Laws of Arrest and Firearms (832 P.C.) 1 1/2 Units

(Formerly Administration of Justice 79 and 150.)

Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173; Mathematics 200 or 210.

One hour lecture, two and one-half hours laboratory. Forty hours for the quarter.

Principles, methods and laws of arrest as required by State of California Peace Officer Standards and Training.

POST 104B PC 932 (Firearms) 3/4 Unit

Prerequisite: Criminal history clearance as provided by Penal Code.

Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173; Mathematics 200 or 210.

Two-thirds hour lecture, one and one-third hour laboratory. Twenty four hours total for the quarter.

(May be taken three times for credit.)

Pass-No Pass (P-NP) course.

This course is the basic POST certified 24-hour firearms training with qualification certificate upon completion.

POST 105 Probation Annual Training 7 1/2 Units

Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173; Mathematics 200 or 210.

Fourteen hours lecture, three and three-fourths hours laboratory. Two hundred eight hours for the quarter.

This course fulfills the California State Board of Corrections annual training requirement for eligible staff to remain current and to upgrade knowledge and skills. Content reflects advisory board, state standards, and agency education and training objectives for probation officers, adult institutions, and juvenile institutions staff.

Peace Officer Standards and Training

POST 53A Basic Police Academy 33 Units

Prerequisite or Corequisite: (1) Peace Officer Standards and Training approved pre-entry English and mathematical skills assessment exam provided by the academy; (2) medical clearance by licensed physician; (3) criminal history clearance pursuant to penal code.

Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173; Mathematics 200 or 210.

Five hundred thirty-six, three hundred forty-four hours laboratory. Eight hundred eighty hours for the quarter.

This 880-hour course of training is certified by the Commission on Peace Officer Standards and Training to meet the statutory basic training requirements. Course requires a significant commitment in time and dedication. Requires both academic and physical skills in addition to extra motivation to endure the intensive agenda.

POST 54A Basic Academy (Modular, Level III-- Part 2) 5 Units

Prerequisite: Current valid PC-832 Arrest Methods & PC-832 Firearms Certificates; POST approved pre-entry English skills assessment exam provided by academy; criminal history clearance as provided by the Penal Code.

Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173.

Nine and one-half hours lecture, one and one-third hours laboratory. One hundred thirty two hours for the quarter.

This course combined with the required PC 832 certificate meets POST requirements for a Level III Reserve Police Officer. The Level III certificate is a prerequisite for Level II and I.

POST 54B Basic Academy (Modular, Level II) 10 1/2 Units

Prerequisite: Current valid PC-832 Arrest Methods & PC-832 Firearms Certificates; completion of Level III, Parts I & II.

Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173; Mathematics 200 or 210.

Seventeen hours lecture, six hours laboratory. Two hundred eighty hours total for the quarter.

This course combined with the required PC 832 certificates meet POST requirements for a Level II Reserve Police Officer. The Level II certificate is a prerequisite for Level I.

POST 54C Basic Academy (Modular, Level I) 18 3/4 Units

Prerequisite: Current valid PC-832 Arrest Methods & PC-832 Firearms Certificates; completion of Level III and Level II; POST approved comprehensive exam provided by academy; medical examination/clearance by a licensed physician.

Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173.

Twenty one hours lecture, twenty one hours laboratory. Five hundred hours total for the quarter.

This course combined with the required PC 832 certificates meet POST requirements for a Level I Reserve Police Officer.

POST 69 Field Training Program 3 Units**POST 69P 6 Units****POST 69Q 9 Units****POST 69R 12 Units****POST 69S 15 Units****POST 69T 18 Units****POST 69U 21 Units****POST 69V 24 Units****POST 69W 27 Units****POST 69X 30 Units****POST 69Y 33 Units****POST 69Z 36 Units**

Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or

English as a Second Language 172 and 173; Mathematics 200 or 210.

POST 110 Basic Public Safety Dispatch 4 1/2 Units

Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173 ; Mathematics 200 or 210.

Two and one-half hours lecture, seven and one-half hours laboratory. One hundred twenty hours for the quarter.

This course is designed to provide dispatchers with the necessary skills and knowledge to perform their job. Curriculum includes computer systems, familiarization, legal updates, communication techniques, etc. It may contain Peace Officer Standards and Training curriculum, as well as local training mandates.

POST 111 Public Safety Dispatch (Update) 1 1/2 Units
POST 111W 4 1/2 Units

Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173 ; Mathematics 200 or 210.

POST 111 is ten hours lecture, thirty hours laboratory (forty total hours) for the quarter. POST 111W is thirty hours lecture, ninety hours laboratory (one hundred twenty hours total) for the quarter.

This course is designed to provide experienced dispatchers with the necessary skills and knowledge to remain current in job skills and knowledge. Curriculum includes computer systems familiarization, legal updates, communication techniques, etc. It may contain Peace Officer Standards and Training curriculum as well as local training mandates.

POST 112 Emergency Medical Dispatch 1 1/2 Units

Prerequisite or Corequisite: Current CPR certification.

Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173 ; Mathematics 200 or 210.

Two and one-half hours lecture, one hour laboratory. Forty hours for the quarter.

This forty hour course will supplement other dispatch courses and is designed to familiarize dispatchers with the overall emergency medical system, provide them with the skills to effectively conduct a medical interrogation and communicate pre-arrival instructions to a caller reporting a medical emergency.

POST 113 Communication Training Officer 1 1/2 Units

Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173 ; Mathematics 200 or 210.

Two and one-half hours lecture, one hour laboratory. Forty hours for the quarter.

This course is designed to educate communications trainers about their responsibilities and roles in training new dispatchers. The course includes topics such as role of the trainer, elements of instruction, legal aspects and liability, evaluations and documentation, critical incident stress, and practical exercises.

POST 114 Basic Fire Dispatch 3 Units

Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173 ; Mathematics 200 or 210.

One and two-thirds hours lecture, five hours laboratory. Eighty hours for the quarter.

This eighty hour course is designed to provide basic fire dispatcher training for entry level and/or experienced dispatchers.

POST 115 Fire Dispatch Update 1 1/2 Units
POST 115W 3 Units

Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173 ; Mathematics 200 or 210.

POST 115 is ten hours lecture, thirty hours laboratory (forty total hours) for the quarter. POST 115W is twenty hours lecture, sixty hours laboratory (eighty total hours) for the quarter.

Designed to provide experienced fire dispatchers with the skills and knowledge necessary to maintain job skills. It completes and updates requirements for basic fire dispatch course.

POST 116 Non-Lethal Chemical Agents Training 1/3 Unit

Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173 ; Mathematics 200 or 210.

Six hours lecture, two hours laboratory. Eight total hours for the quarter .

Includes types of non-lethal chemical agents, methods of dispersal and delivery, safety, first aid, tactics, use of the gas mask and applicable penal code sections. This course is a Peace Officers Standards and Training certified course which is designed to provide sufficient training for use of tear gas and other chemical agents.

POST 117 Advanced Officer Training 3/4 Unit
POST 117W 1 1/2 Units

Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173 ; Mathematics 200 or 210.

POST 117 is twenty hours lecture for the quarter. POST 117W is forty hours lecture for the quarter.

(May be taken for credit once every two years.)

Designed to provide a mechanism whereby agencies may insure that the necessary new skills required of police officers have been provided and that previously learned skills are maintained and reinforced. It will enable the agency to provide a means of correcting deficiencies while satisfying state teaching requirements. New information and changes in the criminal justice system affecting police officers and, when necessary, a review of previously acquired materials will be provided. This course satisfies advanced officer training requirements.

POST 121 Community Service Officer 3 Units

Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173 ; Mathematics 200 or 210.

Six hours lecture, one hour laboratory. Eighty hours for the quarter.

This eighty hour course provides basic information for newly hired community service officers. These employees provide a variety of law enforcement related services, freeing sworn officers for tasks requiring higher level skills and training. The course covers criminal law and procedures, patrol procedures, community relations, traffic enforcement and investigation, investigating procedures, first aid/CPR, report writing, and hazardous materials response.

POST 122 Field Training Officer 1 1/2 Units

Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173 ; Mathematics 200 or 210.

Two and one-third hours lecture, one hour laboratory. Forty hours for the quarter.

This course is primarily designed for police officers that have been or will be accepted into field training officer programs in their respective law enforcement agencies. This course has certification from the California Commission on Peace Officer Standards and Training and follows the guidelines and standards under 832.3 of the Penal Code.

POST 123 Field Evidence Technician 3 Units

Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173 ; Mathematics 200 or 210.

Four hours lecture, two and one-half hours laboratory. Eighty hours for the quarter.

This is an eighty hour in-service course which provides training for law enforcement investigators at a crime scene where evidence needs to be identified, processed, collected and/or safeguarded. The student will be trained in evidence photography, crime scene sketching and appropriate reporting.

POST 124A Background Investigations 3/4 Unit

Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173 ; Mathematics 200 or 210.

Three and one-third hours lecture. Thirty-six hours for the quarter.

A Peace Officer Standards and Training certified course designed to develop in law enforcement officers the skills to be an accomplished background investigator. This course includes the fundamentals of background investigation, interviewing, the use of psychological screening, polygraphs, legal aspects of background investigation, and verbal/nonverbal communication.

POST 124B Drug Investigation (11550) 1 Unit

Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173 ; Mathematics 200 or 210.

Two hours lecture. Twenty-four hours for the quarter.

This is an 11550 Health and Safety Code course covering restricted dangerous drugs: opiates, cocaine, PCP, etc. This course is designed for law enforcement officers desiring to upgrade, refine, or develop an expertise in the field recognition, identification and apprehension of individuals under the influence of narcotics and dangerous drugs. Included is informant development and District Attorney legal update.

POST 125 Police Officer Supervisor 3 Units

Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173 ; Mathematics 200 or 210.

Six and one-third hours lecture, one-third hour laboratory. Eighty hours for the quarter.

This course emphasizes the basic elements of supervision and how they may be applied to police work. Essentials of good leadership and understanding of the basic needs of human beings as well as ways to stimulate subordinates to better performance are the contents of the course. Designed for new sergeants emphasizing the basic elements of supervision, teacher training, conference leadership, and related law enforcement subjects as outlined by Peace Officer Standards and Training.

POST 206N	Special Topics in POST	1/4 Unit
POST 206P		1/2 Unit
POST 206Q		3/4 Unit
POST 206R		1 Unit
POST 206S		1 1/2 Units
POST 206T		2 Units
POST 206U		2 1/2 Units
POST 206V		3 Units
POST 206W		3 1/2 Units
POST 206X		4 Units
POST 206Y		4 1/2 Units
POST 206Z		5 Units

(Formerly Peace Officer Standards and Training 106Z.)

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

Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173.

Two hours lecture-laboratory for each unit of credit.

(Any combination of Peace Officers and Standard Training 206N-Z 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.

In-service training curriculum for personnel attending annual updates, re-certifications, remediation, and assorted legal skills related seminars mandated by the Commission on Peace Officer Standards and Training on an ongoing basis.

POST 207	Skills and Knowledge Module Training	1/4 Unit
POST 207M		1/2 Unit
POST 207N		3/4 Unit
POST 207P		1 Unit
POST 207Q		1 1/4 Unit
POST 207R		1 1/2 Units
POST 207S		1 3/4 Unit
POST 207T		2 Units
POST 207U		2 1/4 Units
POST 207V		2 1/2 Units
POST 207W		23/4 Units
POST 207X		3 Units
POST 207Y		3 1/4 Units
POST 207Z		3 1/2 Units

(Formerly Peace Officer and Standards Training 107.)

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

Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173 ; Mathematics 200 or 210.

Two hours lecture-laboratory for each unit of credit.

(Each module may be taken three times for credit, every two years.)

Pass-No Pass (P-NP) course.

In-service training curriculum for personnel attending annual updates, recertifications, remediation, and assorted legal skills related seminars.

Persian

PERS 91	Elementary Persian (First Quarter)	5 Units
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(See general education pages for the requirement this course meets.)

Advisory: English Writing 200 and Reading 201 (or Language Arts 200), or English as a Second Language 261, 262 and 263.

Five hours lecture, one-hour to be arranged.

Introduction to the language and cultures of the Persian-speaking world. Basic speaking, listening, reading, and writing of Persian will be introduced and practiced within a cultural framework and will be the primary language of instruction. Emphasis will be on language as an expression of culture. Language laboratory practice to reinforce pronunciation, grammar, syntax, and conversation.

PERS 92	Elementary Persian (Second Quarter)	5 Units
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(See general education pages for the requirement this course meets.)

Prerequisite: Persian 91.

Five hours lecture, one-hour laboratory.

Further development of material presented in Persian 91. Continuation of introduction to the language and cultures of the Persian-speaking states. Basic speaking, listening, reading and writing of Persian will be introduced and practiced within a cultural framework. Emphasis will be on language as an expression of culture with special interest in communication. Language laboratory practice to reinforce pronunciation, grammar, and syntax.

PERS 93	Elementary Persian (Third Quarter)	5 Units
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(See general education pages for the requirement this course meets.)

Prerequisite: Persian 92.

Five hours lecture, one-hour laboratory.

Further development of material presented in Persian 91 and 92. Completion of introduction to the language and cultures of the Persian-speaking countries. Basic speaking, listening, reading and writing of Persian will be introduced and practiced within a cultural framework. Emphasis will be on language as an expression of culture. Language laboratory practice to reinforce pronunciation, grammar, and syntax.

PERS 94	Intermediate Persian (First Quarter)	5 Units
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(See general education pages for the requirement this course meets.)

Prerequisite: Demonstrated proficiency in the language competency for

Persian 93 or equivalent

Five hours lecture.

Reading and discussion of texts dealing with the literature, arts, geography, history and culture of the Persian-speaking world. Review of the linguistic functions and grammar structures of introductory Persian. Development of reading, writing, speaking and listening skills at the first intermediate level.

PERS 95	Intermediate Persian (Second Quarter)	5 Units
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(See general education pages for the requirement this course meets.)

Prerequisite: Demonstrated proficiency in the language competency for

Persian 94 or equivalent

Five hours lecture.

Reading and discussion of texts dealing with the literature, arts, geography, history and culture of the Persian-speaking world. Review of the linguistic functions and grammar structures of introductory Persian. Development of reading, writing, speaking and listening skills at the first intermediate level.

PERS 96	Intermediate Persian (Third Quarter)	5 Units
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(See general education pages for the requirement this course meets.)

Prerequisite: Demonstrated proficiency in the language competency for

Persian 95 or equivalent

Five hours lecture.

Reading and discussion of texts dealing with the literature, arts, geography, history and culture of the Persian-speaking world. Review of the linguistic functions and grammar structures of first-year Persian. Development of reading, writing, speaking and listening skills at the third-intermediate level.

Philosophy

PHIL 1	Introduction to Philosophy: Knowledge and Reality	4 Units
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(See general education pages for the requirement this course meets.)

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

Four hours lecture.

A multicultural examination of philosophy as love of speculative and practical wisdom. What philosophers throughout the world have thought about reality and what constitutes our knowing of reality will be the major focus of the course. (CAN PHIL 2)

PHIL 2	Introduction to Philosophy: Morals and Politics	4 Units
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(See general education pages for the requirement this course meets.)

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

Four hours lecture.

Examines fundamental issues and methods in political philosophy in their historical and cultural contexts. While the course will emphasize western moral and political philosophy, nonwestern perspectives will also be included. Issues in moral philosophy include justifications of social and political hierarchies, justice, reason, individual freedom vs. collective identity, rights, notions of value: moral, economic, aesthetic, virtue; relativism vs. moral absolutism, utilitarianism, Kantian ethics, equality vs. merit, justice, and political categories - conservative, liberal, libertarianism, socialism, communitarianism, normalization, eco-feminism.

PHIL 3	Critical Thinking and Writing	5 Units
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(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.

The function and use of formal and informal logic, argument, critical evaluation, and language in written composition.

PHIL 4	Critical Thinking	4 Units
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(See general education pages for the requirement this course meets.)

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

Four hours lecture.

The function of formal and informal logic, argument, critical evaluation, and use of language in interpretation of diverse forms of discourse.

PHIL 5	Inductive Logic	4 Units
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(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 the study of inductive reasoning. The emphasis will be on philosophical efforts to characterize good inductive reasoning, especially the reasoning used to support scientific theories and hypotheses. Closely related topics covered will include probability theory, and the problem of justifying induction.

PHIL 7 Deductive Logic 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.*

Study of the concepts and methods of deductive logic, developing and using logical symbols, formal proof techniques, and focusing on sentential and predicate logic. (CAN PHIL 6)

PHIL 8 Ethics 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 integrated and multicultural study on reflective moral choice; standards of right and wrong, the universality and relativity of ethics, perspectives on moral reasoning, case studies, and contemporary personal and social problems are analyzed; readings from moral philosophy, history, psychology, socio-cultural criticism and other sources will be examined. (CAN PHIL 4)

PHIL 9 Philosophy of Science 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.*

Examines central issues in the philosophy of science. Issues will include the aims of science, scientific explanation, the nature of scientific theories, rationality and the development of science, the relationship between natural and social sciences, the influences of social phenomena such as race, gender, and culture on science, and the influences of science on society.

PHIL 14A Introduction to Eastern Philosophy (India) 4 Units*(Formerly Philosophy 14.)**(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 14A. Student may enroll in either department, but not both, for credit.)**Four hours lecture.*

A study of the development of philosophical thought in South Asia. Primary emphasis is given to the orthodox darshanas, especially Jaina. Attention is given throughout to the influences of Eastern philosophy in modern life.

PHIL 14B Introduction to Eastern Philosophy (China) 4 Units*(Formerly Philosophy 15.)**(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 14B. Student may enroll in either department, but not both, for credit.)**Four hours lecture.*

A study of the evolution of philosophical thought in China and related regions. Emphasis will be directed to Theravada Buddhism and the development of the various schools of Mahayana Buddhism. Related areas of study, such as Taoism and Confucianism, will also be included. Attention is given throughout to the influences of Eastern philosophy in modern life.

PHIL 14C Introduction to Eastern Philosophy (Japan) 4 Units*(Formerly Philosophy 16.)**(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 14C. Student may enroll in either department, but not both, for credit.)**Four hours lecture.*

A study of the evolution of philosophical thought in Japan. The emphasis will be directed to the development of Zen Buddhism. Related areas of study, such as Shinto, will also be included. Attention is given throughout to the influences of Eastern philosophy in modern life.

PHIL 17 Critical Consciousness and Social Change 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 Intercultural Studies 17. Student may enroll in either department, but not both for credit.)**Four hours lecture.*

An exploration of issues related to social change including the development of ways of thinking that promote social change. Students will read classical and contemporary authors on movements for social change, strategies for organizing, and the development of consciousness.

PHIL 20A History of Western Philosophy From Thales to Aristotle 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 the major philosophers in the Western tradition from the pre-Socratics through Plato and Aristotle. An analysis of these philosophers' ideas about the nature of knowledge, what it means to be a human being, and the roots of the idea of philosophy as it is understood in the Western tradition.

(CAN PHIL 8)

PHIL 20B History of Western Philosophy From the Renaissance through Kant 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 the major philosophers of the Western tradition from the Renaissance through the early modern period, with a focus on thinkers such as Descartes, Hume, and Kant. An engagement with these thinkers' ideas about the nature of science, the relationship between reason and religion, and the relationship between mind and body.

PHIL 20C History of Western Philosophy in the 19th and 20th Centuries 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 the major philosophers of the Western tradition in the 19th and 20th Centuries with an emphasis on major philosophers such as Hegel, Russell, Nietzsche, Sartre, DeBeauvoir, and Wittgenstein. An examination of questions about the relationship between language and thought, the nature of human existence, and the limits of philosophy.

PHIL 24 Philosophy of Religion 4 Units*(See general education pages for the requirement this course meets.)**Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173.**Four hours lecture.*

A philosophical investigation of religious experience as expressed by several different human cultures from many different historical periods; an analysis of the emergence of modern western philosophy of religion and its major issues; and an analysis of current issues in contemporary philosophy of religion including such issues as religion and feminism, East-West attitudes toward philosophy and religion, religious fundamentalism and politics, and others.

PHIL 30 Introduction to Existential Phenomenology 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.*

Examination of the problems of knowledge, reality, truth, and value in existential and phenomenological thinkers and their application to social, aesthetic, cultural, gender, historical, and religious issues.

PHIL 49 Women and Philosophy 4 Units*(Formerly Philosophy 55.)**(See general education pages for the requirement this course meets.)**Advisory: English Writing 1A or English as a Second Language 5.**(Also listed as Women's Studies 49. Student may enroll in either department, but not both, for credit.)**Four hours lecture.*

Examination of feminist theory and philosophy produced by a diverse range of women and investigation of the ways that understandings of the relations between the sexes have influenced the work of philosophers from different cultures.

Photography

PHTG 1 Basic Photography 3 Units*Advisory: English Writing 200 and Reading 201 (or Language Arts 200), or English as a Second Language 261, 262 and 263; Mathematics 200 or 210.**Two hours lecture, three hours laboratory.*

Introduction to black and white photography. Overview of the 35mm camera's operating system. Basic understanding of film processing, printing and finishing. Development of critical thinking skills to analyze historical, cultural, conceptual, and practical aspects of a medium used worldwide.

(CAN ART 18)

PHTG 2 Intermediate Photography 3 Units*Prerequisite: Photography 1.**Advisory: English Writing 200 and Reading 201 (or Language Arts 200), or English as a Second Language 261, 262 and 263; Mathematics 200 or 210.**Two hours lecture, three hours laboratory.*

Intermediate black and white photography. Overview of the medium format camera and continued use of the 35mm camera. Demonstration of basic 4x5 camera principles. Introduction to studio lighting and emphasis on studio practices. Continued development of critical thinking skills to analyze historical, cultural, conceptual, and practical aspects of a medium used worldwide.

- PHTG 3 Advanced Photography 3 Units**
(Formerly Photography 51.)
Prerequisite: Photography 2.
Advisory: English Writing 200 and Reading 201 (or Language Arts 200), or English as a Second Language 261, 262 and 263; Mathematics 200 or 210.
Two hours lecture, three hours laboratory.
 Advanced black and white photography. Introduction to large format photography. Pre-visualization of image and the application of the Zone System including archival print processing. Process and print technically and well-conceived images as part of a final portfolio. Refined development of critical thinking skills to analyze historical, cultural, conceptual and practical aspects of a medium used worldwide.
- PHTG 7 Exploring Visual Expression 4 Units**
(Formerly Photography 63.)
(See general education pages for the requirement this course meets.)
Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173.
Four hours lecture, one additional hour to be arranged.
 A comprehensive introduction to the field of photography as a science, an art, and as a medium for visual communication. The development of critical thinking skills to analyze intellectual, philosophical, ethical and aesthetic concerns expressed by photographers worldwide. Basic understanding of light, color, composition and visual awareness. Instruction on the use of 35 mm cameras, lenses, film, and other creative controls of photography for personal expression.
- PHTG 10 History of Early Photography from Its Beginnings to 1925 and Its Impact on Social Change and Communication 4 Units**
(See general education pages for the requirement this course meets.)
Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173.
Four hours lecture, one additional hour to be arranged.
 The development of amateur photography, major artistic styles, a comparison of photography and painting, drawing, and the other visual arts will also be explored. The course will also assess photography's impact on world communication, social change, and the interpretation and analysis of visual reality to 1925.
- PHTG 21 Contemporary Trends in 20th Century Photography 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.
 A comprehensive introduction to the history of 20th Century photography, including major movements, photographers, styles and applications starting in 1925. Examination of photography's impact as a cultural, visual and social force worldwide during the 20th Century.
- PHTG 52 Photography Production Lab 1 Unit**
PHTG 52X 2 Units
Corequisite: Photography 52 students must also enroll in a Photography Department course other than Photography 1, 20, 21. Photography 52 and 52X may not be taken concurrently.
Three hours laboratory per week for each unit of credit.
(Any combination of Photography 52 and 52X may be taken up to six times for the family of courses.)
 Supervised use of photographic studio and darkrooms to complete projects assigned in other photography courses.
- PHTG 54 Experimental Photography 3 Units**
Prerequisite: Photography 1.
Advisory: English Writing 200 and Reading 201 (or Language Arts 200), or English as a Second Language 261, 262 and 263; Mathematics 200 or 210.
Two hours lecture, three hours laboratory.
(May be taken three times for credit.)
 Introduction to experimental and nontraditional photographic processes. Historical and current approaches to both camera and darkroom use in the creation of contemporary photographic images. Addressing the technical, procedural, and interdisciplinary connections from the beginning of photography to today's digital world.
- PHTG 56A Color Photography I 4 Units**
Advisory: Photography 51 and Mathematics 101 or 112 or equivalent.
Two hours lecture, six hours laboratory.
 Negative-positive color systems. Professional procedures for basic color-printing, processing, and print evaluation. Contemporary styles in color photography.
- PHTG 56B Color Photography II 4 Units**
Advisory: Photography 56A.
Two hours lecture, six hours laboratory.
 Reversal System for Color Photography. Film processing, dye-bleach printing, production and printing of inter negatives, silver masking, custom lab operation, permanence of color images.
- PHTG 57A Commercial Photography I 3 Units**
Advisory: Photography 51 and 56A.
Two hours lecture, three hours laboratory.
 Photographs for business and industry. Corrective camera techniques, portrait and product photography, use of studio lights to model form and texture, control of reflections.
- PHTG 57B Commercial Photography II 3 Units**
Advisory: Photography 51 and 56A.
Two hours lecture, three hours laboratory.
 Architectural and fashion photography. Commercial studio organization and operation. Business records, pricing, laws of ownership and privacy. Preparation of a portfolio for seeking employment.
- PHTG 58A Beginning Digital Imaging 3 Units**
Prerequisite: Photography 1.
Advisory: English Writing 200 and Reading 201 (or Language Arts 200), or English as a Second Language 261, 262 and 263.
Two hour lecture, three hours laboratory.
(Any combination of Photography 58A and 58B may be taken up to six times, not to exceed 18 units for the family of courses.)
 Digital imaging using the application Photoshop. Overview of Macintosh operating system. Basic understanding of image capture, input, storage, and output. Use of specifically photographic methods and controls to create and manage imagery in an all digital environment. The development of critical thinking skills to analyze diverse cultural, intellectual, philosophical, ethical and aesthetic concerns of the photographic medium as a part of new technologies.
- PHTG 58B Intermediate/Advanced Digital Imaging 3 Units**
Prerequisite: Photography 58A.
Advisory: English Writing 200 and Reading 201 (or Language Arts 200), or English as a Second Language 261, 262 and 263.
Two hours lecture, three hours laboratory.
(Any combination of Photography 58A and 58B may be taken up to six times, not to exceed 18 units for the family of courses.)
 Refinement of digital imaging skills using the application Photoshop. Learn montage, advanced layering, selecting and masking techniques. Understanding of color management, channels and optimization of the toolbox. Use of specifically photographic methods and controls to create and manage imagery in an all-digital environment. Development of critical thinking skills to analyze diverse cultural, intellectual, philosophical, ethical and aesthetic concerns of the digital photograph.
- PHTG 59 Special Projects in Photography 2 Units**
Prerequisite: Photography 51.
Six hours laboratory.
(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 creative, technical, or applied photography by arrangement with the instructor. A limited area is explored in depth. Six hours per week to be arranged by written contract.
- PHTG 500 Studio Practice 0 Units**
Corequisite: Photography 500 students must also enroll in an art production or skills course.
One and one-half hours laboratory.
(No limit on repeatability for 0 unit classes.)
No grade (NG) course.
 Supervised use of individual production facilities.

Physical Education

- P E 1A Beginning Softball 1/2 Unit**
(See general education pages for the requirement this course meets.)
Two hours laboratory.
(Any combination of Physical Education 1A, 1B, and 1C may be taken six times for credit.)
 Fundamental skills and rules pertaining to softball. Analysis of basic strategy in a game situation and the different outcomes resulting from specific player actions.

P E 6B P E 6BX	Cross Training	1/2 Unit 1 Unit	<i>English as a Second Language 261, 262 and 263.</i> <i>Two hours laboratory for the one-half unit course; three hours laboratory for the one unit course.</i> <i>(Any combination of Physical Education 6Q, 6QX, 6R, 6RX, 6S, and 6SX may be taken up to six times, not to exceed 18 units for the family of courses.)</i> An introduction to the discipline of Physical Education through cardiovascular/aerobic exercise utilizing lo impact techniques, current styles such as tai bo, funk, Latin and hip hop. Students will learn fundamental patterns and routines with popular music accompaniment. Global and historical review of the evolution of aerobic exercise, exercise trends for men, women and athletes as they corresponded with the evolution of the discipline of Physical Education. Students will review and apply basic exercise physiology, nutrition and wellness concepts related to cardiovascular exercise relative to age, gender, or physical limitations.
<i>(See general education pages for the requirement this course meets.)</i> <i>Advisory: English Writing 200 and Reading 201 (or Language Arts 200), or English as a Second Language 261, 262 and 263.</i> <i>Two hours laboratory for the one-half unit course; three hours laboratory for the one unit course.</i> <i>(Any combination of Physical Education 6B and 6BX may be taken up to six times, not to exceed 18 units for the family of courses.)</i> Gain ultimate fitness levels through the use of cross training techniques. Exercises are designed to work both the upper and lower body equally while emphasizing cardiovascular fitness utilizing various aerobic and anaerobic conditioning programs, periodization (interval training) and resistive exercises. Students will participate in both indoor and outdoor facilities.			
P E 6F P E 6FX	Deep Water Running	1/2 Unit 1 Unit	P E 6R P E 6RX
<i>(See general education pages for the requirement this course meets.)</i> <i>Prerequisite: Physical Education 26B or consent of instructor.</i> <i>Advisory: English Writing 200 and Reading 201 (or Language Arts 200), or English as a Second Language 161, 162 and 163.</i> <i>Two hours laboratory for the one-half unit course; three hours laboratory for the one unit course.</i> <i>(Any combination of Physical Education 6F and 6FX may be taken up to six times, not to exceed 18 units for the family of courses.)</i> An introduction to the discipline of Physical Education through deep water running including an historical and global examination of deep water running from fitness rehabilitation and play. Students will improve fitness through a program of cardiovascular endurance, strength development and flexibility using water based exercise routines.			
P E 6G P E 6GX	Aerobic Swimming	1/2 Unit 1 Unit	P E 6S P E 6SX
<i>(See general education pages for the requirement this course meets.)</i> <i>Prerequisite: Physical Education 26C, 26CX, or permission of instructor.</i> <i>Advisory: English Writing 200 and Reading 201 (or Language Arts 200), or English as a Second Language 261, 262 and 263.</i> <i>Two hours laboratory for the one-half unit course; three hours laboratory for the one unit course.</i> <i>(Any combination of Physical Education 6G and 6GX may be taken up to six times, not to exceed 18 units for the family of courses.)</i> An introduction to the discipline of Physical Education through aerobic swimming. Cardiovascular conditioning for the swimmer who is proficient at the intermediate level. Includes global and historical development of swimming as a fitness activity, a review of training methods, measurements, safety, individual program design, exercise physiology and nutrition appropriate to swimming. Intermediate to advanced stroke skills, turns, body positioning, and overall efficiency in the water will be covered.			
P E 6H P E 6HX	Aerobic Walking with Hand Weights	1/2 Unit 1 Unit	P E 6U P E 6UX
<i>(See general education pages for the requirement this course meets.)</i> <i>Advisory: English Writing 200 and Reading 201 (or Language Arts 200), or English as a Second Language 261, 262 and 263.</i> <i>Two hours laboratory for the one-half unit course; three hours laboratory for the one unit course.</i> <i>(Any combination of Physical Education 6H and 6HX may be taken up to six times, not to exceed 18 units for the family of courses.)</i> An introduction to the discipline of Physical Education through aerobic walking with hand weights. Includes an historical and global examination of walking for health and fitness. Students will improve fitness through a progressive program of walking, strength development, and flexibility exercises. Adaptations of the exercises to individual physical abilities and principles of fitness and nutrition will be covered.			
P E 6K P E 6KX	Cardio Kick	1/2 Unit 1 Unit	P E 6V P E 6VX
<i>(See general education pages for the requirement this course meets.)</i> <i>Advisory: English Writing 200 and Reading 201 (or Language Arts 200), or English as a Second Language 261, 262 and 263.</i> <i>Two hours laboratory for the one-half unit course; three hours laboratory for the one unit course.</i> <i>(Any combination of Physical Education 6K and 6KX may be taken up to six times, not to exceed 18 units for the family of courses.)</i> An introduction to the discipline of Physical Education through kickboxing. Dynamic kickboxing techniques are used to provide a level of conditioning for both the aerobic and anaerobic systems. The freestyle interval format combines boxing and kicking drills specific to martial arts and kickboxing integrating the mind/body elements of attitude, readiness, visualization, reaction and fun. Students will participate in a safe, modifiable, program to improve overall fitness, agility, balance, strength, and endurance. An historical examination of Cardio Kick for fitness and its roots in the sports of kickboxing, boxing, and martial arts will be included.			
P E 6Q P E 6QX	Lo Impact Aerobic Rhythms	1/2 Unit 1 Unit	P E 6W P E 6WX
<i>(See general education pages for the requirement this course meets.)</i> <i>Advisory: English Writing 200 and Reading 201 (or Language Arts 200), or English as a Second Language 261, 262 and 263.</i> <i>Two hours laboratory for the one-half unit course; three hours laboratory for the one unit course.</i> <i>(Any combination of Physical Education 6W and 6WX may be taken six times, not to exceed 18 units for the family of courses.)</i> An introduction to the discipline of Physical Education through Core conditioning which is an integrated fitness approach that focuses on developing the stabilization muscles of the center of the body. Included is an historical examination of Core strengthening. Concentration will be on muscles of the torso, back, hips, inner and outer thighs, chest and abdominals. Resistance training, medicine balls, stability balls, and the body bar will be used in conjunction with breathing, posture, and muscle awareness.			

P E 7 P E 7X	Women's Body Mechanics	1/2 Unit 1 Unit	P E 12 P E 12X	Aqua Exercise	1/2 Unit 1 Unit
<p>(See general education pages for the requirement this course meets.) <i>Advisory: English Writing 200 and Reading 201 (or Language Arts 200), or English as a Second Language 261, 262 and 263.</i> <i>Two hours laboratory for the one-half unit course; three hours laboratory for the one unit course.</i> <i>(Any combination of Physical Education 7 and 7X may be taken six times for credit.)</i> An exercise program emphasizing women's strength development, cardiovascular fitness, diet and nutrition. Individual assessment and exercises required to maintain a biomechanically sound posture at rest or while moving.</p>			<p>(See general education pages for the requirement this course meets.) <i>Advisory: English Writing 200 and Reading 201 (or Language Arts 200), or English as a Second Language 261, 262 and 263.</i> <i>Two hours laboratory for the one-half unit course; three hours laboratory for the one unit course.</i> <i>(Any combination of Physical Education 12 and 12X may be taken six times for credit.)</i> An introduction to the discipline of Physical Education through water exercise. Aqua Exercise uses dynamic aerobic exercise techniques to provide a level of conditioning for both the aerobic and anaerobic energy systems. The freestyle interval format combines jogging, jumping, walking, punching, kicking, and a variety of aerobic type movements performed in land based programs. Students will strive for ultimate fitness through a complete program of cardiovascular exercise, strength development, and flexibility. An historical examination of Aqua Exercise for fitness, rehabilitation, and play will be included.</p>		
P E 8 P E 8X	Total Fitness	1/2 Unit 1 Unit	<p>P E 13A Beginning Badminton 1/2 Unit 1 Unit <i>(See general education pages for the requirement this course meets.)</i> <i>Advisory: English Writing 200 and Reading 201 (or Language Arts 200), or English as a Second Language 261, 262 and 263.</i> <i>Two hours laboratory for the one-half unit course; three hours laboratory for the one unit course.</i> <i>(Any combination of Physical Education 13A, 13AX, 13B, 13BX, 13C, 13CX, and 13T may be taken six times for credit.)</i> An introduction to the discipline of Physical Education through badminton. Includes a global and historical examination of the sport, rules, equipment, facilities, etiquette, and basic strokes in beginning level badminton and the use of basic exercise physiology, nutrition, flexibility and strength concepts to improve physical condition in order to play at a more advanced level. The skills portion of the course will encourage an understanding of how to adapt the game and conventional techniques to age, gender and physical conditions.</p>		
<p>(See general education pages for the requirement this course meets.) <i>Advisory: English Writing 200 and Reading 201 (or Language Arts 200), or English as a Second Language 261, 262 and 263.</i> <i>Two hours laboratory for the one-half unit course; three hours laboratory for the one unit course.</i> <i>(Any combination of Physical Education 8 and 8X may be taken up to six times, not to exceed 18 units for the family of courses.)</i> Introduction to the discipline of Physical Education through total fitness, including an historical and global examination of Total Fitness and conditioning. Students will improve fitness through a program of cardiovascular exercise, agility, speed, flexibility, and resistance training using both indoor and outdoor facilities. Fitness assessments will occur throughout the term.</p>			<p>P E 13B Intermediate Badminton 1/2 Unit 1 Unit <i>(See general education pages for the requirement this course meets.)</i> <i>Prerequisite: Physical Education 13A.</i> <i>Two hours laboratory for the one-half unit course; three hours laboratory for the one unit course.</i> <i>(Any combination of Physical Education 13A, 13AX, 13B, 13BX, 13C, 13CX, and 13T may be taken six times for credit.)</i> Intermediate techniques, strategies and analysis of badminton.</p>		
P E 9 P E 9X P E 9Y	Cardiovascular and Strength Training	1/2 Unit 1 Unit 1 1/2 Units	<p>P E 13C Advanced Badminton 1/2 Unit 1 Unit <i>(See general education pages for the requirement this course meets.)</i> <i>Advisory: Physical Education 13B.</i> <i>Two hours laboratory for the one-half unit course; three hours laboratory for the one unit course.</i> <i>(Any combination of Physical Education 13A, 13AX, 13B, 13BX, 13C, 13CX, and 13T may be taken six times for credit.)</i> Advanced skills and strategy as related to competitive play.</p>		
<p>(See general education pages for the requirement this course meets.) <i>Prerequisite: Technical proficiency suitable to the course level.</i> <i>Advisory: English Writing 200 and Reading 201 (or Language Arts 200), or English as a Second Language 261, 262 and 263.</i> <i>Two hours laboratory for the one-half unit course; three hours laboratory for the one unit course; four and one-half hours for the one and one-half unit course.</i> <i>(Any combination of Physical Education 9, 9X, and 9Y may be taken six times for credit.)</i> Introduction to the discipline of Physical Education through cardiovascular and strength training. Includes rules, equipment, facilities, etiquette, safety and technique of cardiovascular and strength training. Includes a brief historical examination of how cardiovascular and strength training has changed due to the influence of individuals and their countries. Students will review and apply basic exercise physiology, nutrition, and flexibility concepts to improve their physical condition.</p>			<p>P E 13T Tournament Badminton 1 Unit <i>(See general education pages for the requirement this course meets.)</i> <i>Advisory: Successful completion of Physical Education 13B or 13BX; intermediate badminton skills.</i> <i>Three hours laboratory.</i> <i>(Any combination of Physical Education 13A, 13AX, 13B, 13BX, 13C, 13CX and 13T may be taken six times for credit.)</i> Skills and strategy as related to competitive play.</p>		
P E 10 P E 10X P E 10Y	Multi-Sport Training	1/2 Unit 1 Unit 1 1/2 Units	<p>P E 14A Beginning Fencing 1/2 Unit 1 Unit <i>(See general education pages for the requirement this course meets.)</i> <i>Advisory: English Writing 200 and Reading 201 (or Language Arts 200), or English as a Second Language 261, 262 and 263.</i> <i>Two hours laboratory for the one-half unit course; three hours laboratory for the one unit course.</i> <i>(Any combination of Physical Education 14A, 14AX, 14B, and 14BX may be taken six times for credit.)</i> Fundamental techniques/skills utilizing the French foil. Students will learn the rules and regulations governing fencing competition. Fundamental exercise physiology, physiological benefits, nutrition and wellness concepts related to total fitness and individual variations due to age, gender, and/or genetics will be explored. A brief historical examination of the various styles of this international sport, its roots, famous male, female and junior champions of the Olympic, PANAM, and World Championships.</p>		
<p><i>Advisory: English Writing 200 and Reading 201 (or Language Arts 200), or English as a Second Language 261, 262 and 263.</i> <i>Two hours laboratory for the one-half unit course; three hours laboratory for the one unit course; four and one-half hours for the one and one-half unit course.</i> <i>(Any combination of Physical Education 10, 10X, and 10Y may be taken up to six times, not to exceed 18 units for the family of courses.)</i> An introduction to the discipline of Physical Education through Multi-Sport fitness. An historical examination of multi-sport training methodology to include triathlon training. The student will strive for ultimate fitness through a program of cardiovascular exercise including interval training, strengthening exercises, and flexibility training both indoors and outdoors with an emphasis on aquatic fitness. Strength, cardiovascular fitness, and flexibility will be monitored and assessed throughout the term.</p>			<p><i>(See general education pages for the requirement this course meets.)</i> <i>Advisory: English Writing 200 and Reading 201 (or Language Arts 200), or English as a Second Language 261, 262 and 263.</i> <i>Two hours laboratory for the one-half unit course; three hours laboratory for the one unit course.</i> <i>(Any combination of Physical Education 11 and 11X may be taken six times for credit.)</i> An introduction to a variety of stretching techniques including passive and active, yoga, tai chi, somatics, sport specific, therapeutic techniques with the aid of rubber band systems, stability balls and other equipment. Emphasis on combining core strengthening, flexibility, balance and spatial awareness exercises. Technique modifications to account for physical limitations and injury avoidance. A brief examination of the evolution of the various forms of stretching and how it may reflect the cultural values of the country the style emanates from. Fundamental exercise physiology, nutrition and wellness concepts related to total fitness and individual variations due to age, gender, and/or genetics.</p>		
P E 11 P E 11X	Stretching	1/2 Unit 1 Unit	<p><i>(See general education pages for the requirement this course meets.)</i> <i>Advisory: English Writing 200 and Reading 201 (or Language Arts 200), or English as a Second Language 261, 262 and 263.</i> <i>Two hours laboratory for the one-half unit course; three hours laboratory for the one unit course.</i> <i>(Any combination of Physical Education 11 and 11X may be taken six times for credit.)</i> An introduction to a variety of stretching techniques including passive and active, yoga, tai chi, somatics, sport specific, therapeutic techniques with the aid of rubber band systems, stability balls and other equipment. Emphasis on combining core strengthening, flexibility, balance and spatial awareness exercises. Technique modifications to account for physical limitations and injury avoidance. A brief examination of the evolution of the various forms of stretching and how it may reflect the cultural values of the country the style emanates from. Fundamental exercise physiology, nutrition and wellness concepts related to total fitness and individual variations due to age, gender, and/or genetics.</p>		

P E 14B Intermediate Fencing 1/2 Unit
P E 14BX 1 Unit
 (See general education pages for the requirement this course meets.)
 Prerequisite: Physical Education 14A.
 Two hours laboratory for the one-half unit course; three hours laboratory for the one unit course.
 (Any combination of Physical Education 14A, 14AX, 14B, and 14BX may be taken six times for credit.)
 Skills and techniques of intermediate fencing: advanced footwork, defensive and offensive skills and strategies of foil fencing, judging and directing of bouting.

P E 15 Beginning Bowling 1/2 Unit
P E 15X 1 Unit
 (See general education pages for the requirement this course meets.)
 Advisory: English Writing 200 and Reading 201 (or Language Arts 200), or English as a Second Language 261, 262 and 263; Mathematics 200 or 210.
 Two hours laboratory for the one-half unit course; three hours laboratory for the one unit course.
 (Any combination of Physical Education 15 and 15X may be taken six times for credit.)
 Skills and techniques of beginning bowling.

P E 16A Beginning Golf 1/2 Unit
P E 16AX 1 Unit
 (See general education pages for the requirement this course meets.)
 Advisory: English Writing 200 and Reading 201 (or Language Arts 200), or English as a Second Language 261, 262 and 263.
 Two hours laboratory for the one-half unit course; three hours laboratory for the one unit course.
 (Any combination of Physical Education 16A, 16AX, 16B, 16BX, and 16C may be taken six times for credit.)
 An introduction to the discipline of Physical Education through the sport of golf. Includes a global and historical examination of the sport, rules, equipment, facilities, etiquette, safety, and basic fundamentals of beginning golf. Students will develop skills in putting, shipping, pitching, and full swing fundamentals utilizing basic theories of physics. The skills portion of the course will encourage an understanding of how to adapt to the game and conventional techniques to an individual's physical abilities. Students will apply basic exercise physiology, nutrition, flexibility and strength concepts to improve their overall playing level.

P E 16B Intermediate Golf 1/2 Unit
P E 16BX 1 Unit
 (See general education pages for the requirement this course meets.)
 Advisory: A basic knowledge of golf and a working awareness of a good golf swing or successful completion of Physical Education 16A or 16AX.
 Two hours laboratory for the one-half unit course; three hours laboratory for the one unit course.
 (Any combination of Physical Education 16A, 16AX, 16B, 16BX, and 16C may be taken six times for credit.)
 Individualized instruction to increase skill levels with emphasis in the use of woods, long irons and sand wedge in specific play situations.

P E 16C Advanced Golf 2 Units
 (See general education pages for the requirement this course meets.)
 Prerequisite: Intermediate golf skills, successful completion of Physical Education 16B or 16BX.
 Advisory: English Writing 200 and Reading 201 (or Language 200), or English as a Second Language 261, 262 and 263.
 Six hours laboratory.
 (Any combination of Physical Education 16A, 16AX, 16B, 16BX, and 16C may be taken six times for credit.)
 Instruction in advanced golf skills and techniques increasing ones knowledge under actual playing conditions.

P E 19A Beginning Volleyball 1/2 Unit
P E 19AX 1 Unit
 (See general education pages for the requirement this course meets.)
 Advisory: English Writing 200 and Reading 201 (or Language Arts 200), or English as a Second Language 261, 262 and 263.
 Two hours laboratory for the one-half unit course; three hours laboratory for the one unit course.
 (Any combination of Physical Education 19A, 19AX, 19B, 19BX, 19C, 19CX and 19T may be taken six times for credit.)
 An introduction to the discipline of Physical Education through the sport of volleyball. Includes rules, equipment, facilities, safety, etiquette, basic fundamentals in beginning level volleyball with strategies for team offense and defense, and a brief historical examination of global contributions by the men and women who changed the game of volleyball. Students will develop passing, hitting, blocking, and serving techniques utilizing fundamental theories of physics. The skills portion of the course will encourage an understanding of how to adapt the game and conventional techniques to an individual's physical abilities. Students will understand and apply basic exercise physiology, nutrition, flexibility, and strength concepts to improve their physical condition in order to play at a more advanced level.

P E 19B Intermediate Volleyball 1/2 Unit
P E 19BX 1 Unit
 (See general education pages for the requirement this course meets.)
 Advisory: Successful completion of Physical Education 19A, or 19AX; beginning volleyball skills.
 Two hours laboratory for the one-half unit course; three hours laboratory for the one unit course.
 (Any combination of Physical Education 19A, 19AX, 19B, 19BX, 19C, 19CX and 19T may be taken six times for credit.)
 Improvement of basic volleyball skills and basic team play strategies.

P E 19C Advanced Volleyball 1/2 Unit
P E 19CX 1 Unit
 (See general education pages for the requirement this course meets.)
 Advisory: Successful completion of Physical Education 19B, 19BX; intermediate volleyball skills.
 Two hours laboratory for the one-half unit course; three hours laboratory for the one unit course.
 (Any combination of Physical Education 19A, 19AX, 19B, 19BX, 19C, 19CX, and 19T may be taken six times for credit.)
 Designed for the student who can successfully execute all fundamental techniques and team plays.

P E 19T Tournament Volleyball 1 Unit
 (See general education pages for the requirement this course meets.)
 Prerequisite: Successful completion of Physical Education 19C or 19CX; advanced volleyball skills.
 Advisory: English Writing 200 and Reading 201 (or Language Arts 200), or English as a Second Language 261, 262 and 263.
 Three hours laboratory.
 (Any combination of Physical Education 19A, 19AX, 19B, 19BX, 19C, 19CX and 19T may be taken six times for credit.)
 A coed activity emphasizing the techniques, skills and strategy related to tournament play.

P E 20A Beginning Archery 1/2 Unit
P E 20AX 1 Unit
 (See general education pages for the requirement this course meets.)
 Advisory: English Writing 200 and Reading 201 (or Language Arts 200), or English as a Second Language 261, 262 and 263.
 Two hours laboratory for the one-half unit course; three hours laboratory for the one unit course.
 (Any combination of Physical Education 20A, 20AX, 20B, and 20BX may be taken up to six times, not to exceed 18 units for the family of courses.)
 An introduction to the discipline of physical education through archery. Includes an historical and global examination of the sport, rules, etiquette, equipment, facilities, and intermediate archery skills along with theories of physics relating to arrow flight and adaptations of the sport to individual physical abilities. Principles of fitness and nutrition as they relate to archery will be covered.

P E 20B Intermediate Archery 1/2 Unit
P E 20BX 1 Unit
 (See general education pages for the requirement this course meets.)
 Advisory: Physical Education 20A or 20AX; English Writing 200 and Reading 201 (or Language Arts 200), or English as a Second Language 261, 262 and 263.
 Two hours laboratory for the one-half unit course; three hours laboratory for the one unit course.
 (Any combination of Physical Education 20A, 20AX, 20B, and 20BX may be taken up to six times, not to exceed 18 units for the family of courses.)
 An introduction to the discipline of physical education through archery. Includes an historical and global examination of the sport, rules, etiquette, equipment, facilities, and intermediate archery skills along with theories of physics relating to arrow flight and adaptations of the sport to individual physical abilities. Principles of fitness and nutrition as they relate to archery will be covered.

P E 21A Beginning Tennis 1/2 Unit
P E 21AX 1 Unit
 (See general education pages for the requirement this course meets.)
 Advisory: English Writing 200 and Reading 201 (or Language Arts 200), or English as a Second Language 261, 262 and 263.
 Two hours laboratory for the one-half unit course; three hours laboratory for the one unit course.
 (Any combination of Physical Education 21A, 21AX, 21B, 21BX, 21C, 21CX, 21D and 21DX may be taken six times for credit.)
 An introduction to the rules, equipment, facilities, etiquette, and basic strokes-forehand, backhand, and serve. Instructors will encourage conventional skill development, but also encourage adaptations based on physical ability, age, strength, gender and/or genetics. A brief historical examination of how the game of tennis has changed due to the influence of individual men, women, and children, of countries, and their styles of play or strategies. Students will review and apply basic exercise physiology, nutrition, flexibility and strength concepts to improve their physical condition in order to play tennis at a more advanced level.



P E 21B Advanced Beginning Tennis 1/2 Unit
P E 21BX 1 Unit

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

Prerequisite: Skills grade of "A" in Physical Education 21A or 21AX, or equivalent skills.

Advisory: English Writing 200 and Reading 201 (or Language Arts 200), or English as a Second Language 261, 262 and 263.

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

(Any combination of Physical Education 21A, 21AX, 21B, 21BX, 21C, 21CX, 21D, and 21DX may be taken six times for credit.)

A continuing introduction to the rules, equipment, facilities, etiquette, and basic strokes--volley, lob and overhead and with further development of the forehand, backhand, serve. Instructors will emphasize conventional skill development, but also encourage adaptations based on physical ability, age, strength, gender and/or genetics. A brief historical examination of how the game of tennis has changed due to the influence of individual men, women, and children, of various countries, and their styles of play or strategies. Students will review and apply basic exercise physiology, nutrition, flexibility and strength concepts to improve their physical condition in order to play tennis at a more advanced level.

P E 21C Intermediate Tennis 1/2 Unit
P E 21CX 1 Unit

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

Prerequisite: Passing skills grade of "B" in Physical Education 21B or 21BX, or equivalent skills based on instructors' evaluation.

Advisory: English Writing 200 and Reading 201 (or Language Arts 200), or English as a Second Language 261, 262 and 263.

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

(Any combination of Physical Education 21A, 21 AX, 21B, 21BX, 21C, 21CX, 21D, and 21DX, may be taken six times for credit.)

Development of consistency, accuracy and control for forehand, backhand ground strokes, serve, volley, lob and overhead skills utilizing fundamental theories of physics. Introducing elements of changing the dynamics of the game with spins and drop shots or by approaching the net; basic singles and doubles strategies. A brief historical examination of how the game of tennis has changed due to the influence of individual men, women, and children, of various countries, and their styles of play or strategies. Students will review and apply basic exercise physiology, nutrition, flexibility and strength concepts to improve their physical condition in order to play tennis at a more advanced level.

P E 21D Advanced Tennis 1/2 Unit
P E 21DX 1 Unit

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

Prerequisite: Passing skills grade of "B" in Physical Education 21C or 21CX, or equivalent skills based on instructors' evaluation.

Advisory: English Writing 200 and Reading 201 (or Language Arts 200), or English as a Second Language 261, 262 and 263.

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

(Any combination of Physical Education 21A, 21AX, 21B, 21BX, 21C, 21CX, 21D, and 21DX may be taken six times for credit.)

Emphasis on consistency, accuracy and control, further development of imparting spin; opponent assessment, advanced offensive and defensive strategies. A brief historical examination of how the game of tennis has changed due to the influence of individual men, women, and children, of various countries, and their styles of play or strategies. Students will review and apply basic exercise physiology, nutrition, flexibility and strength concepts to improve their physical condition in order to play tennis at a more advanced level.

P E 21E Competitive Tennis 2 1/2 Units

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

Prerequisite: Experience in tournament or interscholastic competition or appropriate skill level.

Eight hours laboratory.

(May be taken six times for credit.)

A coeducation program emphasizing competitive tennis play. Open to men and women interested in competing on an intercollegiate athletic tennis team.

P E 22 Theory and Technique of Body Awareness 1 Unit

Advisory: English Writing 200 and Reading 201 (or Language Arts 200), or English as a Second Language 261, 262 and 263.

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

Two hours lecture-laboratory.

(May be taken three times for credit.)

Principles and practice of body awareness, focusing on floor work derived from ballet, contemporary dance, and other psycho-physical disciplines. Alignment and centering, concentration and relaxation, development of the kinesthetic sense and exploration of the body/mind connection.

P E 22K Theory and Technique of Ballet I 1 Unit

(Formerly Physical Education 22B.)

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

Advisory: English Writing 200 and Reading 201 (or Language Arts 200), or English as a Second Language 261, 262 and 263; Physical Education 22 or Dance 22.

(Also listed as Dance 22K. Student may enroll in either department, but not both, for credit.)

Two hours lecture-laboratory.

(Any combination of Physical Education/Dance 22K, 22L, and 22M may be taken up to six times 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.

P E 22L Theory and Technique of Ballet II 2 Units

(Formerly Physical Education 22C.)

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

Prerequisite: Dance/Physical Education 22K.

Advisory: English Writing 200 and Reading 201 (or Language Arts 200), or English as a Second Language 261, 262 and 263.

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

Four hours lecture-laboratory.

(Any combination of Physical Education/Dance 22K, 22L, and 22M may be taken up to six times 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.

P E 23A Theory and Technique of Contemporary (Modern) Dance I 1 Unit

(Formerly Physical Education 23B.)

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

Advisory: English Writing 200 and Reading 201 (or Language Arts 200), or English as a Second Language 261, 262 and 263.

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

Two hours lecture-laboratory.

(Any combination of Physical Education/Dance 23A, 23B, and 23C may be taken up to six times 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.

P E 23B Theory and Technique of Contemporary (Modern) Dance II 2 Units

(Formerly Physical Education 23C.)

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

Advisory: English Writing 200 and Reading 201 (or Language Arts 200), or English as a Second Language 261, 262 and 263; Dance/Physical Education 23A.

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

Four hours lecture-laboratory.

(Any combination of Physical Education/Dance 23A, 23B, and 23C may be taken up to six times 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.

P E 23H Dance Composition 2 Units

Prerequisite: Physical Education or Dance 23D.

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

Four hours lecture-laboratory.

(Any combination of Physical Education 23H and Dance 23H may be taken twice for credit.)

Study of the basic theories and skills of dance choreography. The creation of the student's personal dance works for solo, large and small groups.

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

Advisory: English Writing 200 and Reading 201 (or Language Arts 200), or English as a Second Language 261, 262 and 263.

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

Two hours lecture-laboratory.

(Any combination of Dance 23L and 23M may be taken up to six times 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.

- P E 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 200 and Reading 201 (or Language Arts 200), or English as a Second Language 261, 262 and 263.
(Also listed as Dance 23M. Student may enroll in either department, but not both for credit.)
Two hours lecture-laboratory.
(Any combination of Physical Education 23L and 23M may be taken up to six times for the family of courses.)
Explorations in the art of hip-hop dance. Theory and practice of intermediate/advanced level technique. Development of a complex working hip-hop dance vocabulary.
- P E 23R Dance Repertory (The Assortment)** 5 Units
Prerequisite: Enrollment by audition only. Advisory: English Writing 200 and Reading 201 (or Language Arts 200), or English as a Second Language 261, 262 and 263.
(Also listed as Dance 23R. Student may enroll in either department, but not both, for credit.)
Ten hours lecture-laboratory.
(Any combination of Physical Education and Dance 23R may be taken three times for credit.)
Participation in works choreographed by professionals for the college dance company, The Assortment.
- P E 24A Theory and Technique of Social Dance I** 1 Unit
(See general education pages for the requirement this course meets.)
(Also listed as Dance 24A. Student may enroll in either department, but not both, for credit.)
Two hours lecture-laboratory.
(Any combination of Physical Education/Dance 24A, 24B, and 24C may be taken up to six times for the family of courses.)
Introduction to the 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.
- P E 24B Theory and Technique of Social Dance II** 1 Unit
(See general education pages for the requirement this course meets.)
(Also listed as Dance 24B. Students may enroll in either department, but not both, for credit.)
Two hours lecture-laboratory.
(Any combination of Physical Education/Dance 24A, 24B, and 24C may be taken up to six times for the family of courses.)
The art of social dance, part two. 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.
- P E 24C Theory and Technique of Social Dance III** 1 Unit
(See general education pages for the requirement this course meets.)
(Also listed as Dance 24C. Students may enroll in either department, but not both, for credit.)
Two hours lecture-laboratory.
(Any combination of Physical Education/Dance 24A, 24B, and 24C may be taken up to six times for the family of courses.)
The art of social dance, part three. 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.
- P E 26A Novice Swimming** 1/2 Unit
P E 26AX 1 Unit
(See general education pages for the requirement this course meets.)
Advisory: English Writing 200 and Reading 201 (or Language Arts 200), or English as a Second Language 261, 262 and 263.
Two hours laboratory for the one-half unit course; three hours laboratory for the one unit course.
(Any combination of Physical Education 26A, 26AX, 26B, 26BX, 26C, 26CX, 26D, and 26DX may be taken six times for the family of courses.)
Swimming skills and techniques for the non-swimmer. Global and historical development of swimming as a fitness activity. Novice stroke skills, survival methods, overcoming fear of water, and safety, will be covered. American Red Cross stroke standards will be followed but adaptations will be allowed based on physical ability, age, strength and gender. Students will review basic exercise physiology and nutrition appropriate to swimming.
- P E 26B Beginning Swimming** 1/2 Unit
P E 26BX 1 Unit
(See general education pages for the requirement this course meets.)
Prerequisite: Physical Education 26A or 26AX.
Two hours laboratory for the one-half unit course; three hours laboratory for the one unit course.
(Any combination of Physical Education 26A, 26AX, 26B, 26BX, 26C, 26CX, 26D, and 26DX may be taken six times for the family of courses.)
Swimming skills and techniques for the beginning swimmer. Global and historical development of swimming as a fitness activity. Beginning stroke skills, survival methods, diving from the side of the pool, and deep water swimming will be covered. American Red Cross stroke standards will be followed but adaptations will be allowed based on physical ability, age, strength and gender. Students will review basic exercise physiology and nutrition appropriate to swimming.
- P E 26C Intermediate Swimming** 1/2 Unit
P E 26CX 1 Unit
(See general education pages for the requirement this course meets.)
Prerequisite: Physical Education 26B or 26BX.
Two hours laboratory for the one-half unit course; three hours laboratory for the one unit course.
(Any combination of Physical Education 26A, 26AX, 26B, 26BX, 26C, 26CX, 26D, and 26DX may be taken six times for the family of courses.)
Swimming skills and techniques for the intermediate swimmer. Global and historical development of swimming as a fitness activity. Intermediate stroke skills, springboard diving, turns, and water safety will be covered. American Red Cross stroke standards will be followed but adaptations will be allowed based on physical ability, age, strength and gender. Students will review basic exercise physiology and nutrition appropriate to swimming.
- P E 26D Advanced Swimming** 1/2 Unit
P E 26DX 1 Unit
(See general education pages for the requirement this course meets.)
Prerequisite: Physical Education 26C or 26CX.
Two hours laboratory for the one-half unit course; three hours laboratory for the one unit course.
(Any combination of Physical Education 26A, 26AX, 26B, 26BX, 26C, 26CX, 26D, and 26DX may be taken six times for the family of courses.)
Swimming skills and techniques for the advanced swimmer. Global and historical development of swimming as a fitness activity. Advanced stroke skills, endurance swimming, racing turns and starts, and springboard diving will be covered. American Red Cross stroke standards will be followed but adaptations will be allowed based on physical ability, age, strength and gender. Students will review basic exercise physiology and nutrition appropriate to swimming.
- P E 28A Lifeguard Training** 4 Units
(See general education pages for the requirement this course meets.)
Prerequisite: Pass Red Cross screening test (swim 500 yards continuously, including 200 yards of front crawl using rhythmic breathing to the side or front, 100 yards of breast stroke, 200 yards of front crawl and/or breast stroke; swim 20 yards front crawl or breast stroke, dive to a depth of seven to 10 feet, retrieve a 10-pound object and return to the surface, swim with the weight 20 yards back to the starting point).
Advisory: English Writing 200 and Reading 201 (or Language Arts 200), or English as a Second Language 261, 262 and 263.
Two-and-one-half hours lecture, four-and-one-half hours laboratory.
(May be taken six times for credit.)
A course for lifeguard certification that includes techniques and skills for rescue and personal safety. Instructors will encourage skills adaptations based on physical ability, age, strength, gender and /or genetics. The following certificates are available upon completion: American Red Cross Lifeguard Training, First Aid, CPR for the Professional Rescuer, Head Lifeguard, Waterfront Lifeguard, Automated External Defibrillation Essentials, and Preventing Disease Transmission.
- P E 28G Water Safety Instructor's Course** 4 Units
(See general education pages for the requirement this course meets.)
Prerequisite: Physical Education 26C.
Advisory: English Writing 200 and Reading 201 (or Language Arts 200), or English as a Second Language 261, 262 and 263.
Three hours lecture, three hours laboratory.
(May be taken six times for credit.)
Designed to train instructors in techniques of teaching swimming strokes and related skills.
- P E 30 Introduction to Physical Education** 4 Units
Advisory: English Writing 200 and Reading 201 (or Language Arts 200), or English as a Second Language 261, 262 and 263.
Four hours lecture.
A comprehensive, academic, and analytical study of career choice and the required preparation and training for occupations involved with physical education, fitness, leisure and coaching activities. An in-depth look at past, present, and future foundations, principles, and philosophies of physical education, sport, recreation, and athletics.
- P E 32F Defensive Baseball Techniques** 2 Units
Advisory: English Writing 200 and Reading 201 (or Language Arts 200), or English as a Second Language 261, 262 and 263.
Six hours laboratory.
(May be taken six times for credit.)
Skills and techniques of advanced defensive baseball play. Analysis of movement, team interaction and baseball theory.

P E 32G Offensive Baseball Techniques 2 Units

Advisory: English Writing 200 and Reading 201 (or Language Arts 200), or English as a Second Language 261, 262 and 263.

Six hours laboratory.

(May be taken six times for credit.)

Skills and techniques of advanced offensive baseball play. Analysis of movement, team interaction and baseball theory.

P E 32H Offensive Football Techniques 2 Units

Six hours laboratory.

(May be taken six times for credit.)

Skills and techniques of advanced offensive football play. Analysis of movement, team interaction and football theory.

P E 32I Defensive Football Techniques 2 Units

Six hours laboratory.

(May be taken six times for credit.)

Skills and techniques of advanced defensive football play. Analysis of movement, team interaction and football theory.

P E 32J Water Polo Techniques 2 Units

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

Prerequisite: Competitive water polo experience at the high school, club or collegiate levels.

Advisory: English Writing 100B or Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173.

Six hours laboratory.

(May be taken six times for credit.)

An introduction to the discipline of Physical Education through the sport of water polo. Includes a global and historical examination of the sport, rules, equipment, facilities, and etiquette. Through the intercollegiate competitive experience students will improve their individual water polo skills, increase their ability to employ advanced training and increase their knowledge of exercise physiology, exercise nutrition, kinesiological concepts underlying the development of force, power and biomechanics.

P E 32K Basketball Techniques 2 Units

Six hours laboratory.

(May be taken six times for credit.)

Skills and techniques of advanced basketball play. Analysis of movement, team interaction and basketball theory.

P E 32L Intercollegiate Volleyball Techniques 2 Units

Advisory: English Writing 200 and Reading 201 (or Language Arts 200), or English as a Second Language 261, 262 and 263.

Six hours laboratory.

(May be taken six times for credit.)

Skills and techniques of advanced volleyball play. Analysis of movement, team interaction, and volleyball theory.

P E 32M Soccer Techniques 2 Units

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

Prerequisite: Competitive soccer experience at the high school, club or collegiate levels, or approval of the instructor.

Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173.

Six hours laboratory.

(May be taken six times for credit.)

An introduction to the discipline of Physical Education through the sport of soccer. Includes a global and historical examination of the sport, rules, equipment, facilities, etiquette and contributions of both male and female soccer players. This course is designed to enhance skills and strategies of intermediate or advanced soccer players. Emphasis is placed upon the four pillars of the game necessary to compete successfully in match play. Strategies and tactics of the game will be discussed and performed. Basic exercise physiology, nutrition, flexibility, muscular strength and endurance techniques relative to soccer will be discussed.

P E 32N Track and Field Techniques 2 Units

Advisory: English Writing 200 and Reading 201 (or Language Arts 200), or English as a Second Language 261, 262 and 263.

Six hours laboratory.

(May be taken six times for credit.)

Skills and techniques involved in advanced track and field events. Analysis of movement, team interaction and track and field theory.

P E 32P Techniques of Intercollegiate Swimming 2 Units

Prerequisite: Competitive swimming skills.

Advisory: English Writing 200 and Reading 201 (or Language Arts 200), or English as a Second Language 261, 262 and 263.

Six hours laboratory.

(May be taken six times for credit.)

Skills and techniques of intercollegiate swimming. Personal development in the four competitive strokes.

P E 32S Women's Soccer Techniques 2 Units

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

Prerequisite: Competitive soccer experience at the high school, club or collegiate levels; approval of the instructor.

Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173.

Six hours laboratory.

(May be taken six times for credit.)

An introduction to the discipline of Physical Education through the sport of soccer. Emphasis is placed upon the four pillars of the game necessary to compete successfully in match play. This course is designed to enhance skills and strategies of intermediate or advanced soccer players. Includes a global and historical examination of the sport, rules, equipment, facilities, etiquette and contributions of both male and female soccer experts and players. Strategies and tactics of the game will be discussed and performed. Basic exercise physiology, nutrition, flexibility, muscular strength and endurance techniques relative to soccer will be discussed.

P E 32W Softball Techniques 2 Units

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

Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173.

Six hours laboratory.

(May be taken six times for credit.)

An introduction to the discipline of Physical Education through softball techniques. Includes a global and historical examination of the skills and techniques of advanced softball and the changes that have influenced the modern game. Includes analysis of movement, team interaction, and softball theory. Through the study of film, the student will learn the various segments of offensive and defensive play. Exercise physiology, nutrition, flexibility and strength concepts for conditioning will be covered.

P E 33A Soccer 1/2 Unit**P E 33AX**

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

Advisory: English Writing 200 and Reading 201 (or Language Arts 200), or English as a Second Language 261, 262 and 263.

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

(Any combination of Physical Education 33A, 33AX, 33H, 33I, and 33IX may be taken six times for the family of courses.)

An introductory course to enhance skills used in the game of soccer, including a global perspective and the contributions of both male and female soccer experts and players. Emphasis will be on the four major pillars of the game: technical ability, tactical understanding, physical fitness, and the mental approach necessary to compete successfully in match play. Strategies and tactics of the game will also be discussed and performed. There will be an introduction to the laws of the game, equipment, fair play, flexibility, nutrition, and the nuances of the game. Use of the Internet and other media sources will be encouraged to further understand the world's most popular game.

P E 33H League Soccer 1 Unit

(Formerly Physical Education 33B.)

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

Limitation on enrollment: Must be a current high school student attending one of the high schools approved for this course.

Advisory: English Writing 200 and Reading 201 (or Language Arts 200), or English as a Second Language 261, 262 and 263.

Four hours laboratory.

(Any combination of Physical Education 33A, 33AX, 33H, 33I, and 33IX may be taken six times for the family of courses.)

Designed to enhance skills and strategies of high school soccer players through match play. Emphasis is placed on the four major pillars of the game: technical ability, tactical understanding, physical dimension, and the mental approach to compete successfully in match play.

P E 33I Indoor Soccer 1/2 Unit**P E 33IX**

(Formerly Physical Education 33C and 33CX.)

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

Advisory: English Writing 200 and Reading 201 (or Language Arts 200), or English as a Second Language 261, 262 and 263.

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

(Any combination of Physical Education 33A, 33AX, 33H, 33I, and 33IX may be taken six times for the family of courses.)

An introductory course to enhance skills used in the game of Indoor Soccer, including a global perspective and the contributions of both male and female soccer experts and players. Emphasis will be on the four major pillars of the game: technical ability, tactical understanding, physical fitness, and the mental approach necessary to compete successfully in match play. Strategies and tactics of the game will also be discussed and performed. There will be an introduction to the laws of the game, equipment, fair play, flexibility, nutrition, and the nuances of the game. Use of the Internet and other media sources will be encouraged to further understand Indoor Soccer.

- P E 35 Care and Prevention of Athletic Injuries 4 Units**
Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173 ; Physical Education 85M or Biology 40A, 40B, or Physical Education 54.
Three hours lecture, three hours laboratory.
 Treatment and preventative procedures in sports medicine. Emphasis on anatomical basis for recognition and evaluation of sports-related injuries. Treatment focuses on immediate first aid, preventative techniques, and injury stress test and rehabilitation.
- P E 37A Theory and Technique of Jazz Dance I 1 Unit**
(Formerly Physical Education 23E.)
Advisory: English Writing 200 and Reading 201 (or Language Arts 200), or English as a Second Language 261, 262 and 263; Physical Education 22.
(Also listed as Dance 37A. Student may enroll in either department, but not both, for credit.)
Two hours lecture-laboratory.
(Any combination of Physical Education/Dance 37A and 37B may be taken up to six times for the family of courses.)
 Introduction to the art of jazz dance. Exposure to major influences, artists and works. The development of a working vocabulary; and practice of basic techniques.
- P E 37B Theory and Technique of Jazz Dance II 2 Units**
(Formerly Physical Education 23F.)
Prerequisite: Physical Education 37A.
(Also listed as Dance 37B. Student may enroll in either department, but not both, for credit.)
Four hours lecture-laboratory.
(Any combination of Physical Education/Dance 37A and 37B may be taken up to six times for the family of courses.)
 Elements of time, space, shape and motion as related to American jazz dance. Basic jazz techniques; participation in significant jazz dance styles; and acquisition of a working jazz dance vocabulary.
- P E 39 Intercollegiate Men's Soccer 3 Units**
(See general education pages for the requirement this course meets.)
Prerequisite: Competitive soccer experience, medical examination, and athletic eligibility (concurrent enrollment and successful completion of 12 academic units).
Advisory: English Writing 200 and Reading 201 (or Language Arts 200), or English as a Second Language 261, 262 and 263.
Ten hours laboratory.
(May be taken six times for credit.)
 Community college intercollegiate men's soccer. Designed to enhance skills and strategies of advanced male soccer players. Emphasis is on the four major pillars of the game: mental, physical, tactical, and technical aspects necessary to successfully compete in match play.
- P E 39W Intercollegiate Women's Soccer 3 Units**
(See general education pages for the requirement this course meets.)
Prerequisite: Competitive soccer experience, medical examination, and athletic eligibility (concurrent enrollment and successful completion of 12 academic units).
Advisory: English Writing 200 and Reading 201 (or Language Arts 200), or English as a Second Language 261, 262 and 263.
Ten hours laboratory.
(May be taken six times for credit.)
 Community college intercollegiate women's soccer. Designed to enhance skills and strategies of advanced female soccer players. Emphasis is on the four major pillars of the game: mental, physical, tactical, and technical aspects necessary to successfully compete in match play.
- P E 40 Intercollegiate Football 3 Units**
(See general education pages for the requirement this course meets.)
Prerequisite: Competitive football experience, medical examination, athletic eligibility (concurrent enrollment and successful completion of 12 academic units).
Ten hours laboratory.
(May be taken six times for credit.)
 Competitive intercollegiate football: personal development towards athletic scholarship and career opportunities.
- P E 41 Intercollegiate Water Polo 3 Units**
(See general education pages for the requirement this course meets.)
Prerequisite: Competitive water polo experience, medical examination, athletic eligibility (concurrent enrollment and successful completion of 12 academic units).
Ten hours laboratory.
(May be taken six times for credit.)
 Competitive intercollegiate water polo: personal development towards athletic scholarship and career opportunities.
- P E 42W Intercollegiate Volleyball (Women's) 3 Units**
(See general education pages for the requirement this course meets.)
Prerequisite: Competitive volleyball experience, medical examination and athletic eligibility. (Each athlete must be enrolled in 12 quarter units, of which ten quarter units are in academic areas. Second year athletes must have completed 36 quarter units, of which 30 quarter units are in academic areas. Athletes must maintain a cumulative grade point average of 2.0 on a 4.0 point scale.)
Advisory: English Writing 200 and Reading 201 (or Language Arts 200), or English as a Second Language 261, 262 and 263.
Ten hours laboratory.
(May be taken six times for credit.)
 Competitive intercollegiate volleyball. Personal development toward athletic scholarship and career opportunities.
- P E 43 Intercollegiate Cross Country 3 Units**
(See general education pages for the requirement this course meets.)
Prerequisite: Competitive cross country experience, medical examination and athletic eligibility. (Each athlete must be enrolled in 12 quarter units, of which ten quarter units are in academic areas. Second year athletes must have completed 36 quarter units, of which 30 quarter units are in academic areas. Athletes must maintain a cumulative grade point average of 2.0 on a 4.0 point scale.)
Advisory: English Writing 200 and Reading 201 (or Language Arts 200), or English as a Second Language 261, 262 and 263.
Ten hours laboratory.
(May be taken six times for credit.)
 Competitive intercollegiate cross country. Personal development leading towards athletic scholarship and career opportunities.
- P E 44M Intercollegiate Men's Basketball 3 Units**
(See general education pages for the requirement this course meets.)
Prerequisite: Competitive basketball experience, medical examination, and athletic eligibility (concurrent enrollment and successful completion of 12 academic units).
Ten hours laboratory. By arrangement.
(May be taken six times for credit.)
- P E 44W Intercollegiate Women's Basketball 3 Units**
(See general education pages for the requirement this course meets.)
Prerequisite: Competitive basketball experience, medical examination, athletic eligibility (concurrent enrollment and successful completion of 12 academic units).
Ten hours laboratory.
(May be taken six times for credit.)
 Competitive intercollegiate basketball: personal development towards athletic scholarship and career opportunities.
- P E 45 Intercollegiate Men's/Women's Swimming and Diving 3 Units**
(See general education pages for the requirement this course meets.)
Prerequisite: Competitive swimming/diving experience; medical examination (concurrent enrollment in 12 or more units, second year athletes must fulfill requirements as per the COA)
Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173.
Ten hours laboratory. By arrangement.
(May be taken six times for credit.)
 An introduction to the discipline of Physical Education through swimming and diving. Includes a global and historical examination of the sport, rules, equipment, facilities, and etiquette. Through the intercollegiate competitive experience students will improve their individual swimming and diving skills, increase their ability to employ advanced training and increase their knowledge of exercise physiology, exercise nutrition, kinesiological concepts underlying the development of force, power and biomechanics.
- P E 46 Intercollegiate Track and Field 3 Units**
(See general education pages for the requirement this course meets.)
Prerequisite: Competitive track and field experience, medical examination and athletic eligibility (concurrent enrollment and successful completion of 12 academic units).
Ten hours laboratory. By arrangement.
(May be taken six times for credit.)
- P E 47M Intercollegiate Baseball 3 Units**
(See general education pages for the requirement this course meets.)
Prerequisite: Competitive baseball experience, medical examination and athletic eligibility (concurrent enrollment and successful completion of 12 academic units).
Ten hours laboratory. By arrangement.
(May be taken six times for credit.)

P E 47W Intercollegiate Women's Softball 3 Units

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

Prerequisite: Competitive softball experience, medical examination, and athletic eligibility (concurrent enrollment and successful completion of 12 academic units).

Ten hours laboratory.

(May be taken six times for credit.)

Competitive intercollegiate softball: personal development towards athletic scholarship and career opportunities.

P E 48M Intercollegiate Men's Tennis 3 Units

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

Prerequisite: Competitive tennis experience, medical examination (Concurrent enrollment in 12 or more units, second year athletes must fulfill academic requirements as per the COA.)

Advisory: English Writing 200 and Reading 201 (or Language Arts 200), or English as a Second Language 261, 262 and 263.

Ten hours laboratory. By arrangement.

(May be taken six times for credit.)

An introduction to the discipline of physical education through tennis includes a global and historical examination of the sport, rules, equipment, facilities, and etiquette. Through the intercollegiate competitive experience students will improve their individual tennis skills, increase their ability to employ advanced strategies and increase their knowledge of exercise physiology, exercise nutrition, kinesiological concepts underlying the development of force, power and accuracy.

P E 48W Intercollegiate Women's Tennis 3 Units

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

Prerequisite: Competitive tennis experience, medical examination (Concurrent enrollment in 12 or more units, second year athletes must fulfill academic requirements as per the COA.)

Advisory: English Writing 200 and Reading 201 (or Language Arts 200), or English as a Second Language 261, 262 and 263.

Ten hours laboratory. By arrangement.

(May be taken six times for credit.)

An introduction to the discipline of physical education through tennis includes a global and historical examination of the sport, rules, equipment, facilities, and etiquette. Through the intercollegiate competitive experience students will improve their individual tennis skills, increase their ability to employ advanced strategies and increase their knowledge of exercise physiology, exercise nutrition, kinesiological concepts underlying the development of force, power and accuracy.

P E 50A Topics in Theory and Technique of World Dance 1 Unit

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

Advisory: English Writing 200 and Reading 201 (or Language Arts 200), or English as a Second Language 261, 262 and 263.

(Also listed as Dance 50A. Student may enroll in either department, but not both, for credit.)

Two hours lecture-laboratory.

(Any combination of Dance 50A and Physical Education 50A may be taken six times as long as the topics/projects 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.

P E 51 Health and Fitness 4 Units

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

Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173.

(Also listed as Health 51. Student may enroll in either department, but not both, for credit.)

Four hours lecture.

Introduction to the disciplines of Physical Education and Health through fitness, wellness and lifestyle management. Concepts of wellness from an interdisciplinary and global perspective. Practices and beliefs that contribute to fitness and healthful living. Students will be exposed to past and current theories of health and fitness with emphasis on how lifestyle, wellness, and personal fitness are affected by genetics, gender, and age. Each student will assess their own cardiovascular capacity, muscular strength and endurance, flexibility, body composition, and diet during the class.

P E 53 Stress Management 1 Unit

One hour lecture.

Natural techniques that effectively relieve stress-related physical problems. Each student will develop and implement a personal stress reduction program. Students will be exposed to information on how lifestyle, gender, age, personality and occupation affect stress and the ability to successfully cope with it.

P E 54 Introduction to Massage 4 Units

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

Advisory: Biology 40A and 40B; English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173.

Three hours lecture, three hours laboratory.

Introduction to the discipline of Physical Education through the field of Massage Therapy. Includes theory, practical experience, methods, procedures, and contraindications. Students will be exposed to the rich international history of massage and to a variety of techniques from around the world including the contributions of men and women to the field.

P E 54A Intermediate Massage 3 Units

Prerequisite: Physical Education 54 or technical proficiency suitable to the course level.

Advisory: Biology 47A and 47B; English Writing 200 and Reading 201 (or Language Arts 200), or English as a Second Language 261, 262 and 263.

Two hours lecture, three hours laboratory.

Further study and practice utilizing the principles of massage therapy.

P E 54B Sports Massage 3 Units

Prerequisite: Physical Education 54 or technical proficiency suitable to the course level.

Advisory: Biology 47A and 47B; English Writing 200 and Reading 201 (or Language Arts 200), or English as a Second Language 261, 262 and 263.

Two hours lecture, three hours laboratory.

Study of the movements involved in sports activity and common areas of injury. Massage techniques and evaluation procedures for creating a massage specific to the athlete's condition and sport.

P E 54C Advanced Massage Skills 4 Units

Prerequisite: Physical Education 54B.

Advisory: Biology 47A and 47B; English Writing 200 and Reading 201 (or Language Arts 200), or English as a Second Language 261, 262 and 263.

Three hours lecture, three hours laboratory.

Methods and procedures of advanced soft tissue techniques and related topics; an amplification of techniques practiced in Physical Education 54, 54A, and 54B.

P E 54D Clinical Practicum in Massage Therapy 3 Units

Prerequisite: Physical Education 54C or technical proficiency suitable to course level.

Advisory: English Writing 200 and Reading 201 (or Language Arts 200), or English as a Second Language 261, 262 and 263.

One hour lecture, six hours laboratory.

Clinical practice in massage therapy: methods, procedures and experience.

P E 54E Table Shiatsu 4 Units

Prerequisite: Physical Education 54D.

Advisory: English Writing 200 and Reading 201 (or Language Arts 200), or English as a Second Language 261, 262 and 263.

Three hours lecture, three hours laboratory.

Theory, methods, procedures and practice of Shiatsu, a Japanese method of hands-on healing.

P E 54F Introduction to Chair Massage 3 Units

Prerequisite: Physical Education 54D and 54E, or consent of instructor.

Advisory: Biology 40A; English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173.

Two hours lecture, three hours laboratory.

An introduction to the practice of chair massage. Includes a global and historical examination of chair massage, with an exploration of a variety techniques and modalities used throughout the world. The theory behind chair massage will be covered. Students will be given practical experiences, and critiques will be used to evaluate proper methods, procedures, and for correcting any contraindications.

P E 54T Internship in Massage Therapy 1 Unit

P E 54U 2 Units

P E 54V 3 Units

P E 54W 4 Units

P E 54X 5 Units

P E 54Y 6 Units

P E 54Z 7 Units

Prerequisite: Physical Education 54A or technical proficiency suitable to the course level.

Advisory: English Writing 200 and Reading 201 (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 Physical Education 54T-Z may be taken six times for credit.)

Opportunities for students in massage therapy training to gain additional experience in the field under the supervision of an instructor, athletic trainer, or coach.

P E 60	Introduction to Parks and Recreation	3 Units	<i>Advisory: English Writing 200 and Reading 201 (or Language Arts 200), or English as a Second Language 261, 262 and 263. (Also listed as Dance 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 Physical Education/Dance 78L-U may be taken up to six times, not to exceed 18 units, as long as the topics/projects are different each time.)</i>
<i>(Formerly Recreation Management 50A and Physical Education 50.) Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173. Three hours lecture.</i>			<i>Projects for groups in special areas of interest relative to but outside of the departmental curriculum.</i>
P E 63A	Beginning Sailing	1 Unit	P E 85 Exercise Science 2 Units
<i>Prerequisite: Physical Education 26C, or technical proficiency suitable to the course level; swimming test required. Advisory: English Writing 200 and Reading 201 (or Language Arts 200), or English as a Second Language 261, 262 and 263. Three hours laboratory. (Any combination of Physical Education 63A and 63B may be taken up to six times for the family of courses.)</i>			<i>Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173 ; Biology 10 or 11 or equivalent. Two hours lecture.</i>
<i>Introduction to sailing. Theory of sail, terminology, and development of basic small sailboat handling skills on inland lakes.</i>			<i>Basic concepts of anatomy, physiology, nutrition, and exercise physiology for students planning on majoring in Physical Education and/or completing a certificate program in personal trainer, massage therapy, or coaching.</i>
P E 63B	Intermediate Sailing	1 Unit	P E 85A Personal Fitness Trainer 2 Units
<i>Prerequisite: Physical Education 62G and 63A, or technical proficiency suitable to the course level; swimming test required. Advisory: English Writing 200 and Reading 201 (or Language Arts 200), or English as a Second Language 261, 262 and 263. Three hours laboratory. (Any combination of Physical Education 63A and 63B may be taken up to six times for the family of courses.)</i>			<i>Advisory: Completion of or concurrent enrollment in Physical Education 85. One-and-one-half hours lecture, two hours laboratory.</i>
<i>Intermediate sailing skill development, theory, terminology, concepts and small boat handling on inland lakes.</i>			<i>Concepts needed for instruction to develop individualized strength and cardiovascular fitness programs.</i>
P E 70A	Orientation to the Lifetime Fitness Center	2 Units	P E 85M Introduction to Athletic Injuries 2 Units
<i>(Physical Education 70A and 71 were formerly Physical Education 70.) (See general education pages for the requirement this course meets.) Corequisite: Physical Education 70A students must also enroll in Physical Education 71, Physical Education-Adapted 1, 1X, 2, 2X, 3, 3X, 4, 4X, 5, or 5X. Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173. Two hours lecture.</i>			<i>Advisory: English Writing 200 and Reading 201 (or Language Arts 200), or English as a Second Language 261, 262 and 263. One hour lecture, three hours laboratory.</i>
<i>Introduction to fitness, wellness and lifestyle management. Students will be exposed to past and current theories of health and fitness with emphasis on how lifestyle, wellness, and personal fitness are affected by genetics, gender, and age. Each student will perform a pre- and post- assessment of their own cardiovascular capacity, muscular strength and endurance, flexibility, and body composition during the class and receive instruction on the proper use of the Lifetime Fitness Center.</i>			<i>Introduction to basic taping and wrapping techniques for various athletic injuries. A general awareness of common injuries associated with athletics and the appropriate first aid.</i>
P E 71	Lifetime Wellness and Fitness Center Laboratory	1 Unit	P E 85S Fitness Assessment for Personal Trainers 3 Units
<i>(Physical Education 70A and 71 were formerly Physical Education 70.) (See general education pages for the requirement this course meets.) Prerequisite: Concurrent enrollment in or successful completion of Physical Education 70A, Health 51, or Physical Education 51. Three hours laboratory. (May be taken six times for credit.)</i>			<i>Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173; Mathematics 200 or 210, Physical Education 85. Two and one-half hours lecture; one and one-half hours laboratory.</i>
<i>Laboratory designed to improve student's cardiorespiratory fitness, muscular strength and endurance, flexibility and body composition. Strength and muscular endurance will be developed using Magnum weight equipment. Cardiorespiratory programs will be run on treadmills, cycles, stair steppers, and elliptical trainers.</i>			<i>Basic concepts of fitness assessment for personal trainers. Includes measurement of cardiovascular fitness and use of American College of Sports medicine metabolic equations, body composition using skinfold equations and calipers, muscular strength and endurance, and flexibility. Test results will be analyzed and used for exercise prescription.</i>
P E 77	Special Projects in Physical Education	1/2 Unit	P E 88A Coaching I 2 Units
P E 77X		1 Unit	<i>Advisory: English Writing 200 and Reading 201 (or Language Arts 200), or English as a Second Language 261, 262 and 263. Two hours lecture.</i>
P E 77Y		1 1/2 Units	<i>Introduction and continuing education into the theories, techniques, strategies, and qualifications related to sport and athletic coaching. An in-depth analysis of coaching responsibilities and practical applications associated with youth (Little League, Pop Warner, American Youth Soccer Organization, and Y.M.C.A.), middle school, high school, community college, and four year university levels of competition and play.</i>
<i>(Formerly Physical Education 29, 29X, and 29Y.) Three hours laboratory for each unit of credit. (Any combination of Physical Education 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.)</i>			<i>Advisory: English Writing 200 and Reading 201 (or Language Arts 200), or English as a Second Language 261, 262 and 263; Mathematics 200 or 210; Physical Education 88A. Two hours lecture.</i>
<i>Designed for students who are doing a project directly under the supervision of a credentialed De Anza College instructor. These projects are undertakings that are not in the regular physical education curriculum.</i>			<i>Introduction and continuing education into the theories, techniques, strategies, and qualifications related to sport and athletic coaching. An in-depth analysis of the relationship between organization, management, and administration of sports including: fund raising, team leadership skills, facility usage, and legal liabilities associated with youth (Little League, Pop Warner, American Youth Soccer Organization, and Y.M.C.A.), middle school, high school, community college, and four year university levels of competition and play.</i>
P E 78L	Special Problems in Dance	1/2 Unit	P E 88B Coaching II 2 Units
P E 78M		1 Unit	<i>Advisory: English Writing 200 and Reading 201 (or Language Arts 200), or English as a Second Language 261, 262 and 263; Mathematics 200 or 210; Physical Education 88A. Two hours lecture.</i>
P E 78N		2 Units	<i>Introduction and continuing education into the theories, techniques, strategies, and qualifications related to sport and athletic coaching. An in-depth analysis of the relationship between organization, management, and administration of sports including: fund raising, team leadership skills, facility usage, and legal liabilities associated with youth (Little League, Pop Warner, American Youth Soccer Organization, and Y.M.C.A.), middle school, high school, community college, and four year university levels of competition and play.</i>
P E 78P		3 Units	
P E 78Q		4 Units	
P E 78R		5 Units	
P E 78S		6 Units	
P E 78T		7 Units	
P E 78U		8 Units	
<i>(Formerly Physical Education 25L-U.) Prerequisite: Enrollment by audition only.</i>			P E 210 Sports Conditioning 0 Units
			P E 210W 0 Units
			P E 210X 0 Units
			P E 210Y 0 Units
			P E 210Z 0 Units
			<i>(Formerly Physical Education 110, 110W-Z.) Non-credit course - Does not apply to De Anza Associate degree. Two hours laboratory for Physical Education 210; three hours laboratory for Physical Education 210W; six hours laboratory for Physical Education 210X; nine hours laboratory for Physical Education 210Y; and twelve hours laboratory for Physical Education 210Z. (No limit on repeatability for 0 unit classes.)</i>
			<i>Conditioning and testing principles for all sports. Measuring strengths and weaknesses of student athlete at De Anza College with emphasis on the athlete's pre-season conditioning. Standards will be established for each athlete, plus team norms.</i>

P E 215 Conditioning for Intercollegiate Athletes 2 Units
 (Formerly Physical Education 115.)
 Credit course - Does not apply to De Anza Associate degree.
 Advisory: English Writing 200 and Reading 201 (or Language Arts 200), or English as a Second Language 261, 262 and 263
 Six hours laboratory.
 (May be taken six times for credit.)
 Exercise physiology theory and sport-specific weight training for athletes.

P E 535 Athletic Injury Rehabilitation 0 Units
 Prerequisite: Athlete/Student must have completed a pre-participation exam, sustained an athletic injury, and is under the care of an athletic trainer.
 Five to fifty hours laboratory.
 (No limit on repeatability for 0 unit classes.)
 No grade (NG) course.
 Provides supervised rehabilitation program for athlete/student injured while competing for De Anza College.

P E 545 Non-Intercollegiate Swimming Competition and Training 0 Units
 Prerequisite: Competitive swimming experience or appropriate skill level and exceeded college swimming repeatability.
 Five to fifty hours laboratory.
 (No limit on repeatability for 0 unit classes.)
 No grade (NG) course.
 Provides supervised swimming workout for students desiring to develop more stroke efficiency, improve fitness, and gain experience swimming in competition outside of the intercollegiate swimming program.

P E 570 Lifetime Fitness Center 0 Units
 Prerequisite/Corequisite: Previous or concurrent enrollment in Physical Education 70 or 70A; or Health 51 or Physical Education 51.
 Ten hours laboratory.
 (No limit on repeatability for 0 unit classes.)
 No grade (NG) course.
 Provides supervised exercise time for students desiring to exercise more than three hours per week in the Lifetime Fitness Center.

Physical Education/Adapted

Physical Education classes for individuals with special needs.

PEA 1 Adapted Total Fitness 1/2 Unit
PEA 1X 1 Unit
 (See general education pages for the requirement this course meets.)
 Advisory: English Writing 200 and Reading 201 (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 Adapted Physical Education 1 and 1X may be taken up to six times for the family of courses.)
 Development and maintenance of strength, flexibility and aerobic fitness for students with a verified physical disability.

PEA 2 Adapted Strength Development 1/2 Unit
PEA 2X 1 Unit
 (See general education pages for the requirement this course meets.)
 Advisory: English Writing 200 and Reading 201 (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 Adapted Physical Education 2 and 2X may be taken up to six times for the family of courses.)
 Development and maintenance of muscular strength for students with a verified physical disability.

PEA 3 Adapted Stretching 1/2 Unit
PEA 3X 1 Unit
 (See general education pages for the requirement this course meets.)
 Advisory: English Writing 200 and Reading 201 (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 Adapted Physical Education 3 and 3X may be taken up to six times for the family of courses.)
 Development and maintenance of flexibility for students with a verified physical disability.

PEA 4 Adapted Aerobic Fitness 1/2 Unit
PEA 4X 1 Unit
PEA 4Y 1 1/2 Units
PEA 4Z 2 Units
 (See general education pages for the requirement this course meets.)

Advisory: English Writing 200 and Reading 201 (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 Adapted Physical Education 4, 4X, 4Y, and 4Z may be taken up to six times or the family of courses.)
 Development and maintenance of aerobic fitness for students with a verified physical disability.

PEA 5 Adapted Aquatic Fitness 1/2 Unit
PEA 5X 1 Unit
 (See general education pages for the requirement this course meets.)
 Advisory: English Writing 200 and Reading 201 (or Language Arts 200), or English as a Second Language 161, 162 and 163.
 Three hours laboratory for each unit of credit.
 (Any combination of Adapted Physical Education 5 and 5X may be taken up to six times for the family of courses.)
 Development and maintenance of aquatic fitness for students with a verified physical disability.

PEA 26X Care and Prevention of Back Disorders 1 Unit
 Prerequisite: Medical release form signed by physician.
 Three hours laboratory.
 Individualized exercise program for students with back disorders. Remedial exercises designed to relieve or reduce back pain.

Physical Therapist Assistant

Admission to the Physical Therapist Assistant Curriculum is based on GPA (minimum of 2.8 required), minimum of 100 hours of volunteer work, or three months of paid work in a patient care field; completion of prerequisite coursework including Biology 40A and 40B; English Writing 1A or English as a Second Language 5; Mathematics 101 or 112; and completion of physician-signed health form. Admission by application only; deadline is April 5.

PTHR 50 Introduction to Physical Therapy 2 Units
 Advisory: English Writing 200 and Reading 201 (or Language Arts 200), or English as a Second Language 261, 262 and 263.
 Two hours lecture.
 Physical Therapy and the allied health field scope of practice; differentiation of PT, PT Assistant, PT Aide; health care delivery systems; work settings; historical background; ethical and legal practices in a diverse, multicultural society. Identification of roles in health care.

PTHR 53 Functional Activities for Orthopedic and Cardiopulmonary Disorders 2 Units
 Prerequisite: Biology 40B; English Writing 1A or English as a Second Language 5; Mathematics 101 or 112; work/volunteer experience in patient care; and a grade point average of 2.8 or above.
 One hour lecture, three hours laboratory.
 Bed mobility, positioning, transfer and gait training for non-neurological patients with consideration to issues of gender, body type, cultural practices and occupational work life.

PTHR 54A Kinesiology and Orthopedic Disorders 5 Units
 Prerequisite: Biology 40B; English Writing 1A or English as a Second Language 5; Mathematics 101 or 112; work/volunteer in patient care; and a grade point average of 2.8 or above.
 Three hours lecture, six hours laboratory.
 Kinesiology and orthopedic disorders of the vertebral column and the lower extremities addressing relevant issues of gender, body types, cultural practices and occupational work life. Incorporating these issues into the development of beginning exercise programs to address musculoskeletal pathology of the thoracic and lumbar spine, pelvis and lower extremity. Goniometry and manual muscle testing of the vertebral column and lower extremity.

PTHR 54B Kinesiology and Orthopedic Disorders 5 Units
 Prerequisite: Physical Therapist Assistant 54A.
 Three hours lecture, six hours laboratory.
 Kinesiology of cervical spine, temporomandibular joint and upper extremity, addressing relevant issues of gender, body type, cultural practices and occupational work life. Incorporating these issues into the development of beginning exercise and orthopedic disorders of the same. Goniometry of cervical spine and upper extremity. Postural Assessment.

PTHR 54C Physical Therapy Modalities 4 Units
 Prerequisite: Physical Therapist Assistant 54B and 55.
 Two hours lecture, six hours laboratory.
 Thermal physiology and modalities of heat, cold, sound; methods for edema control; vital signs; massage; treatment documentation. Addressing relevant issues of gender, body type, cultural practices and occupational work life.

PTHR 55 Cardiovascular, Respiratory, and Multi System Disorders 3 Units

Prerequisite: Physical Therapist Assistant 53 and 54A.

Three hours lecture, one additional hour to be arranged.

Disorders of the cardiovascular, respiratory and immune systems as influenced by aging, occupational work habits, gender, ethnicity, culture and geographical region. Thermal injuries. Multi system disorders. Infectious disease control. Pulmonary hygiene techniques.

PTHR 62 Central Nervous System Disorders 2 1/3 Units

Prerequisite: Physical Therapist Assistant 64A and 70B.

Twenty seven hours lecture for the quarter.

Central Nervous System and Peripheral Nervous System control of movement. Central nervous system disorders. Sensory, perceptual, and cognitive assessment.

PTHR 64A Prosthetics, Orthotics, and Therapeutic Exercise for Orthopedic and Cardiopulmonary Disorders 3 Units

Prerequisite: Physical Therapy 54C and 70A.

Two hours lecture, three hours laboratory.

Gait analysis. Prosthetics and orthotics. Therapeutic exercise for orthopedic and cardiac patients.

PTHR 64B Functional Activities for Central Nervous System Disorders 2 1/2 Units

Prerequisite: Physical Therapist Assistant 64A and 70B.

Sixty three hours lecture-laboratory, twelve additional hours to be arranged, for the quarter.

Normal and abnormal motor development with consideration given to environmental, cultural, socioeconomic and personal influences. Therapeutic exercise, functional activity and ambulation training for patients with a variety of central nervous system disorders. Assessment of home and environmental accessibility.

PTHR 64C Electrotherapy 2 Units

Prerequisite: Physical Therapist Assistant 64B, and 70C.

One and one-half hours lecture, two hours laboratory.

Electrotherapeutic management of innervated and denervated muscle, pain, control, edema control, and wound healing and biofeedback. Respectful treatment delivery.

PTHR 65 Psycho-Social Aspects of Disability 1 1/4 Units

Prerequisite: Physical Therapist Assistant 62, 64B, and 70C.

One and one-fourth hours lecture.

Social and psychological aspects of disease and injury, patient-therapist relationships, supportive measures which enhance healthy behaviors and support culturally competent health care delivery in a dynamic and diverse health care system.

PTHR 66 Role and Function of the Physical Therapist Assistant 1 1/4 Units

Prerequisite: Physical Therapist Assistant 62, 64B, and 70C.

One and one-fourth hours lecture.

Scope of practice of physical therapist and physical therapist assistant, professional ethics, legal aspects of practice, supervising relationships, job seeking skills, preceptor training.

PTHR 70A Clinical Experience I 3 Units

Prerequisite: Physical Therapist Assistant 50, 54B, and 55.

One hour lecture, six hours laboratory.

Pass-No Pass (P-NP) course.

Directed patient care in selected physical therapy facilities.

PTHR 70B Clinical Experience II 4 1/3 Units

Prerequisite: Physical Therapist Assistant 54C and 70A.

One hour lecture, ten hours laboratory.

Pass-No Pass (P-NP) course.

Supervised culturally competent patient treatment and supportive care activities in a selected physical therapy site with weekly seminar.

PTHR 70C Clinical Experience III 6 2/3 Units

Prerequisite: Physical Therapist Assistant 62 and 64B.

Twenty hours laboratory, one additional hour to be arranged.

Pass-No Pass (P-NP) course.

Continuation of Physical Therapist Assistant 70B. Supervised, safe and culturally competent patient treatment in one physical therapy clinical center.

PTHR 70D Clinical Experience IV 6 2/3 Units

Prerequisite: Physical Therapist Assistant 64C, 65, and 66.

Twenty hours laboratory.

Pass-No Pass (P-NP) course.

Continuation of Physical Therapist Assistant 70C. Supervised, safe and culturally competent patient treatment in one physical therapy clinical center.

Physics

PHYS 2A General Introductory Physics 5 Units

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

Prerequisite: Mathematics 1A (may be taken concurrently).

Advisory: Physics 50; English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173.

Four hours lecture, three hours laboratory.

An introduction to the most fundamental of all sciences. An elementary study of the basic physical laws describing the motion of bodies. Includes the study of oscillations, waves, and sound. Applications to every day physical phenomena in problem solving using verbal logic, critical thinking, and mathematics up to elementary calculus. In the laboratory, explore experimental scientific procedures by comparing theoretical models to classic experiments using standard measurement techniques, basic uncertainty analysis, and graphical interpretations of data.

(PHYS 2A + 2B + 2C = CAN PHYS SEQ A)

PHYS 2B General Introductory Physics 5 Units

Prerequisite: Physics 2A.

Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173.

Four hours lecture, three hours laboratory.

The laws of mechanics applied to those of electricity and magnetism. An introduction to the physical properties of that fundamental quantity called charge. Includes the study of DC and AC circuits and their elementary applications. Concludes with electromagnetic waves. In the laboratory, learn to construct elementary circuits, measure and analyze their properties with electronic equipment including the oscilloscope, and study the behavior of moving charge in magnetic fields.

(PHYS 2A + 2B + 2C = CAN PHYS SEQ A)

PHYS 2C General Introductory Physics 5 Units

Prerequisite: Physics 2B.

Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173.

Four hours lecture, three hours laboratory.

Study fluids, optics, thermodynamics and modern physics. In the laboratory, continue to deepen an understanding of scientific procedure by applying theoretical models to classic experiments.

(PHYS 2A + 2B + 2C = CAN PHYS SEQ A)

PHYS 4A Physics for Scientists and Engineers: Mechanics 6 Units

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

Prerequisite: Physics 50 with a grade of C or better, or equivalent;

Mathematics 1B (may be taken concurrently).

Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173.

Five hours lecture, three hours laboratory.

A rigorous introduction to the physical laws that describe and explain the motion of bodies. Analyze the structure of classical mechanics and its applications to problem solving using verbal logic, critical analysis, and mathematical models. Investigate general scientific procedures as a quantitative interplay between experimentation and theory employing statistical methods, graphical techniques, and measurement theory.

(CAN PHYS 8), (PHYS 4A+4B+4C = CAN SEQ B),

(PHYS 4A+4B+4C+4D = CAN SEQ C)

PHYS 4B Physics for Scientists and Engineers: Electricity and Magnetism 6 Units

Prerequisite: Physics 4A; Mathematics 1B.

Corequisite: Physics 4B students must also enroll in Mathematics 1C.

Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173.

Five hours lecture, three hours laboratory.

An introduction to classical electromagnetism. Includes DC and AC circuits and elementary field theory.

(CAN PHYS 12), (PHYS 4A+4B+4C = CAN SEQ B),

(PHYS 4A+4B+4C+4D = CAN SEQ C)

PHYS 4C Physics for Scientists and Engineers: Fluids, Waves, Optics and Thermodynamics 6 Units

Prerequisite: Physics 4B; Mathematics 1C.

Corequisite: Physics 4C students must also enroll in Mathematics 1D.

Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173.

Five hours lecture, three hours laboratory.

Introductory studies in static and dynamic fluids, mechanical and non-mechanical waves, geometrical and physical optics, heat and the laws of thermodynamics.

(CAN PHYS 14), (PHYS 4A+4B+4C = CAN SEQ B),

(PHYS 4A+4B+4C+4D = CAN SEQ C)

PHYS 4D Physics for Scientists and Engineers: Modern Physics 6 Units

Prerequisite: Physics 4C; Mathematics 1D.

Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173.

Five hours lecture, three hours laboratory.

Physics meets the twentieth century with a study of special relativity and quantum mechanics. Nuclear physics, elementary particles, and other selected topics are treated as time allows.

(CAN PHYS 16), (PHYS 4A+4B+4C+4D = CAN SEQ C)

PHYS 10 Concepts of Physics 5 Units

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

Prerequisite: Qualifying score on the Intermediate Algebra Placement Test or Mathematics 105 or 114.

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

Five hours lecture.

Explore the fundamental concepts of physics as applied to everyday phenomena from an essentially non-mathematical perspective emphasizing verbal logic, critical analysis, and rational thought. Analyze the history of scientific procedure as an interplay between theory and experimentation. Critically evaluate the role of scientific discovery in the success and development of technology.

PHYS 50 Preparatory Physics 3 Units

Advisory: Mathematics 49B and Physics 10.

Three hours lecture.

Basic problem solving techniques in mechanics as a preparation for Physics 4A.

PHYS 77 Special Projects in Physics 1 Unit**PHYS 77X 2 Units****PHYS 77Y 3 Units**

(Formerly Physics 40, 40X, and 40Y.)

Prerequisite: Consent of instructor and division dean.

Three hours laboratory for each unit of credit.

(Any combination of Physics 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.)

Pass-No Pass (P-NP) course.

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

Political Science

POLI 1 American Government and Politics 4 Units

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

Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173.

Four hours lecture.

Critical examination of the contemporary and historical struggle for the development of democratic political institutions in the United States at the state, local, and national levels. Particular emphasis given to the conflict between traditional elite's versus historically disenfranchised social groups (women, people of color, and workers) in the conduct of U.S. political life.

(CAN GOVT 2)

POLI 2 Comparative Politics 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.

Critical examination of the historical and contemporary development of various current major world political systems and the comparison of political phenomena at the nation-state, inter-state and global level of analysis.

POLI 3 International Relations 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.

Critical examination of the basic elements of contemporary international relations: scope, terminology, methodology, sovereignty, nationalism, national policies, globalization, power, international and regional political systems. The course will also discuss non-governmental organizations and issues such as human rights and the environment.

POLI 5 Introduction to Political Thought 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.

This course will survey the field of political theory including how to interpret, discuss, and write about classical and contemporary political thought and theory, especially theory developing among constituent groups which have traditionally been excluded from full participation in U.S. political life. Through this course of study, students will learn to think critically about classic problems in politics (e.g., individual versus group rights, freedom, equality and distributional justice, order, etc.).

POLI 10 Introduction to Administration of Justice (CP 1) 4 Units

Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173.

(Also listed as Administration of Justice 1. Student may enroll in either department, but not both, for credit.)

Four hours lecture.

The history and philosophy of the administration of justice in America. A study of the overall system from its European antecedents and development within the United States; identification of various subsystems and components; their role expectations and interrelationships; basic premise of crime, punishment and rehabilitation; the role of education in the administration of justice within a democracy.

POLI 11 Federal Courts and Constitutional Law 4 Units

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

(Also listed as Paralegal 11 and Administration of Justice 11. Student may enroll in only one department, for credit.)

Four hours lecture.

Federal court procedure and the impact of U.S. Constitutional law on federal and state law. Read and analyze the Constitution. Effect of U.S. Supreme Court cases on current constitutional interpretation.

POLI 13 Concepts of Criminal Law (CP 2) 5 Units

Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173.

(Also listed as Paralegal 3 and Administration of Justice 3. Student may enroll in only one department, for credit.)

Four hours lecture, three hours directed research.

Historical development, philosophy of law, and constitutional provisions; definitions, classification of crime, and their application to the system of administration of justice; legal research, study of case law, methodology and concepts of law as a social force.

POLI 15 Grassroots Democracy (Race, Culture and Liberation) 4 Units

(Formerly Political Science 53.)

(See modules under Political Science 53G-J.)

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

(Students who have received credit for the four-unit parent course, Social Science 15, Political Science 15, or Women's Studies 15 may not also receive credit for any of the modules.)

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

(Also listed as Social Science 15 and Women's Studies 15. Student may enroll in only one department, for credit.)

Four hours lecture.

(The courses are not repeatable, and students may receive a maximum of four units of credit for any combination of Social Science 15, 53G-J, Political Science 15, 53G-J, and Women's Studies 15, 53G-J.)

Applied and theoretical study for students of social justice, this course will examine race, culture and political change through a comparative analysis of American experiences of migration. Particular emphasis will be on the historical experiences of European immigrants, African Americans, Mexican Americans, and Asian Americans. The course will also discuss the contemporary social and cultural implications of the migration process. Using a multidisciplinary social science approach, attention will be given to issues of race, ethnicity, gender, and class, as well as the role of the state (policy) to the process of immigration.

POLI 16 Grassroots Democracy (Social Movements Since the 1960s) 4 Units

(Formerly Political Science 54.)

(See modules under Political Science 54G-J.)

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

(Students who have received credit for the four-unit parent course, Social Science 16, Political Science 16, or Women's Studies 16, may not also receive credit for any of the modules.)

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

(Also listed as Social Science 16 and Women's Studies 16. Student may enroll in only one department, for credit.)

Four hours lecture.

(The courses are not repeatable, and students may receive a maximum of four units of credit for any combination of Social Science 16, 54G-J, Political Science 16, 54G-J, and Women's Studies 16, 54G-J.)

Applied and theoretical study for students of social justice, this course is a comparative survey of protest movements since the 1960s. An introductory, comparative, and interdisciplinary study of Mexican American, African American, Asian American, and/or whole working class social and political struggles from 1960 to the present. The course traces the development of protest movements in response to racial, class, gender, and political inequality in the context of U.S. politics and history. The course critically examines the internal and external factors contributing to the rise and fall of social and political movements with special attention to the conjuncture of gender, race, ethnicity, culture, class, and sexual preferences in contemporary U.S. politics.

POLI 53G Comparative Immigration and Democracy 2 Units
(Students who have received credit for the four-unit parent course, Social Science 15, Political Science 15, or Women's Studies 15, may not also receive credit for any of the modules.)
 Advisory: English Writing 1A or English as a Second Language 5.
(Also listed as Women's Studies 53G, and Social Science 53G. Student may enroll in only one department, for credit.)
 Two hours lecture.
(The courses are not repeatable, and students may receive a maximum of four units of credit for any combination of Social Science 15, 53G-J, Political Science 15, 53G-J, and Women's Studies 15, 53G-J.)
 This course will examine race, culture and political change through a comparative analysis of American experiences of migration. Particular emphasis will be placed on the historical experiences of European immigrants, African Americans, Mexican Americans, and Asian Americans.

POLI 53H Contemporary Legacies of Immigration 2 Units
(Students who have received credit for the four-unit parent course, Social Science 15, Political Science 15, or Women's Studies 15, may not also receive credit for any of the modules.)
 Advisory: English Writing 1A or English as a Second Language 5.
(Also listed as Women's Studies 53H, and Social Science 53H. Student may enroll in only one department, for credit.)
 Two hours lecture.
(The courses are not repeatable, and students may receive a maximum of four units of credit for any combination of Social Science 15, 53G-J, Political Science 15, 53G-J, and Women's Studies 15, 53G-J.)
 This course will examine race, culture and political change through a comparative analysis of the contemporary social and cultural implications of past and current migration processes. Particular emphasis will be placed on the contemporary experiences of European Americans, African Americans, Mexican Americans, and Asian Americans.

POLI 53I Comparative Immigration and State Policy 1 Unit
(Students who have received credit for the four-unit parent course, Social Science 15, Political Science 15, or Women's Studies 15, may not also receive credit for any of the modules.)
 Advisory: English Writing 1A or English as a Second Language 5.
(Also listed as Women's Studies 53I, and Social Science 53I. Student may enroll in only one department, for credit.)
 One hour lecture.
(The courses are not repeatable, and students may receive a maximum of four units of credit for any combination of Social Science 15, 53G-J, Political Science 15, 53G-J, and Women's Studies 15, 53G-J.)
 This course will examine race, culture and political change through a comparative analysis of state policy towards migration. Particular emphasis will be placed on the historical experiences of European immigrants, African Americans, Mexican Americans, and Asian Americans.

POLI 53J Contemporary Legacies of Immigration and State Policy 1 Unit
(Students who have received credit for the four-unit parent course, Social Science 15, Political Science 15, or Women's Studies 15, may not also receive credit for any of the modules.)
 Advisory: English Writing 1A or English as a Second Language 5.
(Also listed as Women's Studies 53J and Social Science 53J. Student may enroll in only one department, for credit.)
 One hour lecture.
(The courses are not repeatable, and students may receive a maximum of four units of credit for any combination of Social Science 15, 53G-J, Political Science 15, 53G-J, and Women's Studies 15, 53G-J.)
 This course will examine race, culture and political change through a comparative analysis of state policy affecting the contemporary social and cultural consequences of past and current migration processes. Particular emphasis will be placed on the contemporary experiences of European Americans, African Americans, Mexican Americans, and Asian Americans.

POLI 54G Social Movements During the 60s 2 Units
(Students who have received credit for the four-unit parent course, Social Science 16, Political Science 16, or Women's Studies 16, may not also receive credit for any of the modules.)
 Advisory: English Writing 1A or English as a Second Language 5.
(Also listed as Women's Studies 54G and Social Science 54G. Student may enroll in only one department, for credit.)
 Two hours lecture.
(The courses are not repeatable, and students may receive a maximum of four units of credit for any combination of Social Science 16, 54G-J, Political Science 16, 54G-J, and Women's Studies 16, 54G-J.)
 An introductory, comparative, and interdisciplinary study of Mexican American, African American, Asian American, and white working class social and political struggles during the 1960s.

POLI 54H Social Movements After the 60s 2 Units
(Students who have received credit for the four-unit parent course, Social Science 16, Political Science 16, or Women's Studies 16, may not also receive credit for any of the modules.)
 Advisory: English Writing 1A or English as a Second Language 5.
(Also listed as Women's Studies 54H and Social Science 54H. Student may enroll in only one department, for credit.)
 Two hours lecture.
(The courses are not repeatable, and students may receive a maximum of four units of credit for any combination of Social Science 16, 54G-J, Political Science 16, 54G-J, and Women's Studies 16, 54G-J.)
 An introductory, comparative, and interdisciplinary study of Mexican American, African American, Asian American, and white working class social and political struggles after the 1960s.

POLI 54I Social Movements and Inequality 1 Unit
(Students who have received credit for the four-unit parent course, Social Science 16, Political Science 16, or Women's Studies 16, may not also receive credit for any of the modules.)
 Advisory: English Writing 1A or English as a Second Language 5.
(Also listed as Women's Studies 54I and Social Science 54I. Student may enroll in only one department, for credit.)
 One hour lecture.
(The courses are not repeatable, and students may receive a maximum of four units of credit for any combination of Social Science 16, 54G-J, Political Science 16, 54G-J, and Women's Studies 16, 54G-J.)
 The course traces the development of protest movements in response to racial, class, gender, and political inequality in the context of U.S. politics and history.

POLI 54J Social Movements and Diversity 1 Unit
(Students who have received credit for the four-unit parent course, Social Science 16, Political Science 16, or Women's Studies 16, may not also receive credit for any of the modules.)
 Advisory: English Writing 1A or English as a Second Language 5.
(Also listed as Women's Studies 54J and Social Science 54J. Student may enroll in only one department, for credit.)
 One hour lecture.
(The courses are not repeatable, and students may receive a maximum of four units of credit for any combination of Social Science 16, 54G-J, Political Science 16, 54G-J, and Women's Studies 16, 54G-J.)
 The course critically examines the internal and external factors contributing to the rise and fall of social and political movements with special attention to the conjuncture of gender, race, ethnicity, culture, class, and sexual preference in contemporary U.S. politics.

POLI 75 Principles and Procedures of the Justice System (CP 6) 4 Units
(Formerly Political Science 12.)
 Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173.
(Also listed as Administration of Justice 75 and Paralegal 75. Students may enroll in only one department, for credit.)
 Four hours lecture.
 Procedures followed by law enforcement and courts in criminal cases; constitutional principles governing those procedures.

POLI 95 Overview of American Law 4 Units
 Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173.
(Also listed as Paralegal 95 and Administration of Justice 95. Student may enroll in only one department, for credit.)
 Four hours lecture.
 Overview of the major substantive areas of American law: agency, contracts, constitutional law, corporations, criminal law, family law, property, torts, wills, and estates.

Psychology

PSYC 1 General Psychology 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.
 Factors influencing human behavior including: biological and neurological processes and structures, evolution, genetics, gender, life span development, consciousness, attention, sensation, perception, learning, memory cognition, intelligence, motivation, emotion, stress, personality, psychopathology, psychotherapy, social and cultural determinants.
 (CAN PSY 2)



PSYC 2 Psychology as a Behavioral Science and Profession 6 Units

Prerequisite: Psychology 1.
Advisory: English Writing 1A or English as a Second Language 5.
 Five hours lecture, three hours laboratory, one additional hour to be arranged.
 Psychology as a behavioral science and profession. Basic principles of learning, and behavior modification.

PSYC 3 Human Experimental Psychology (An Introduction to Cognitive Science) 6 Units

Advisory: English Writing 1A or English as a Second Language 5; Psychology 1.
 Five hours lecture, three hours laboratory, one additional hour to be arranged.
 A survey of human experimental psychology and cognitive science with emphasis on research design, methodology and scientific report writing. Research design and methodology will be illustrated and integrated through a selected review of concepts and research in neurophysiology, sensation, perception and memory.

PSYC 4 Abnormal Psychology 4 Units

Advisory: English Writing 1A or English as a Second Language 5.
 Four hours lecture.
 A historical overview of abnormal psychology with emphasis on current paradigms and models in psychopathology and therapy including a survey of research methodology; clinical assessment, classification, and diagnosis with special focus on cultural, gender, and age issues in psychopathology and therapy.

PSYC 5 Introduction to Theories of Personality 4 Units

(See general education pages for the requirement this course meets.)
Advisory: English Writing 1A or English as a Second Language 5; Psychology 1.
 Four hours lecture.
 Survey of major theories and concepts of personality. Topics to include: Freudian, neo-Freudian, interpersonal, dispositional, behavioral and phenomenological theories.

PSYC 6 Introduction to Humanistic Psychology 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.
 A survey of humanistic, existential-phenomenological psychology and Eastern thought. A cross-cultural survey of humanistic personality principles including Western European existential phenomenological psychology and the current and historical impact of Eastern thought.

PSYC 8 Introduction to Social Psychology 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.
 The scientific study of the way individuals think, feel and behave in social situations. The systematic approach will include cross cultural and comparative perspectives.

PSYC 9 Psychology of Human Relationships and Normal Adjustment 4 Units

(Formerly Psychology 33.)
(See general education pages for the requirement this course meets.)
Advisory: English Writing 1A or English as a Second Language 5.
 Four hours lecture.
 A survey of current theoretical and applied psychological knowledge relevant to personal/social interactions and normal psychological adjustment.

PSYC 10G Child Development (The Early Years) 4 Units

(Formerly Psychology 62A and 62G.)
(See general education pages for the requirement this course meets.)
Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173.
(Also listed as Child Development 10G. Student may enroll in either department, but not both, for credit.)
 Three hours lecture, three hours laboratory, one additional hour to be arranged.
 Critical examination of human growth and development from conception to middle childhood with particular attention given to current theoretical and research perspectives within a diverse society. Observational study of children with analysis of factors influencing development including conditions that put children at risk.

PSYC 10H Child Development (Middle Childhood and Adolescence) 4 Units

(Formerly Psychology 62B.)
(See general education pages for the requirement this course meets.)
Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173.
(Also listed as Child Development 10H. Student may enroll in either department, but not both, for credit.)
 Three hours lecture, three hours laboratory, one additional hour to be arranged.
 Critical examination of human growth and development from school age through adolescence with particular attention given to current theoretical and research perspectives within a diverse society.

PSYC 12 Psychology of Women 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 Women's Studies 12. Student may enroll in either department, but not both, for credit.)
 Four hours lecture.
 A survey of the psychobiological, cultural, social, and intellectual factors influencing the psychology of women.

PSYC 14 Developmental Aspects of Psychology 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.
 Interaction of the physical, social, gender role, cognitive and personality development across the life span.

PSYC 15 Basic Statistics and Research Methods in Psychology 4 Units

Prerequisite: Psychology 1; Mathematics 105 or 114 or equivalent.
Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173.
(Also listed as Sociology 15. Student may enroll in either department, but not both, for credit.)
 Four hours lecture.
 Elementary statistics including measures of central tendency, variability, probability, correlation, tests of significance, experimental and quasi-experimental designs. (CAN PSY 6)

PSYC 24 Introduction to Psychobiology 4 Units

Prerequisite: Psychology 1.
Advisory: English Writing 1A or English as a Second Language 5.
 Four hours lecture.
 A survey of the central and peripheral nervous system processes underlying the behavior of humans and animals, with emphasis on evolutionary, genetic and gender differences underlying social behavior, the basic anatomical and physiological substrates of behavior and consciousness and on the neural mechanisms and sensory processes associated with learning, language, perception, motivation, emotion, sleep, speech, and sexual behavior.

PSYC 60 Industrial Organizational Psychology 4 Units

Advisory: Psychology 1; English Writing 1A or English as a Second Language 5.
 Four hours lecture.
 Application of psychological principles to issues faced by business and industry, law, government, and the military services.

PSYC 63 Sexual Assault, Police and Community 4 Units

Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173.
(Also listed as Administration of Justice 62. Student may enroll in either department, but not both, for credit.)
 Four hours lecture.
 Societal and psychological aspects of sexual assault, the perpetrators and the victims; practical application of the police investigation, the criminal justice process, and the social service intervention.

PSYC 64 Psychology Internship 1 Unit

PSYC 64X 2 Units

PSYC 64Y 3 Units

PSYC 64Z 4 Units

Advisory: Psychology 1, 74A, 74B, and 62A; English Writing 1A or English as a Second Language 5.
 Four hours per week laboratory per unit of supervised internship in an authorized office or agency.
(Any combination of Psychology 64, 64X, 64Y, and 64Z may be taken up to six times, not to exceed 18 units for the family of courses.)
 Program of work experience and study in Psychology or Human Services under the supervision of the instructor and agency personnel.

PSYC 67 Introduction to Clinical Psychology 4 Units

Advisory: English Writing 1A or English as a Second Language 5.
 Four hours lecture.
 An analysis of the major theoretical formulations in the history of clinical psychology, from classical psychoanalysis to contemporary existentialism and behavior modification. An overview of diagnosis, assessment and treatment methods. An examination of clinical psychology as a profession including education, training, specialties and employment.

PSYC 74A Interviewing, Interrogation and Crisis Intervention 4 Units

Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173.

(Also listed as Administration of Justice 74A and Paralegal 74A. Student may enroll in only one department, for credit.)

Four hours lecture.

Theories, principles and strategies of tactical and interpersonal communication necessary to interview victims, witnesses, and suspects; crisis intervention strategies for victims and witnesses of crime; communication with individuals from diverse backgrounds with consideration to race, ethnicity, gender, age and special needs.

Reading

(See other self-paced Reading courses under Skills.)

READ 80 College Reading 4 Units

Prerequisite: Satisfactory completion of Reading 100; or eligibility for English Writing 1A; or instructor recommendation.

Four hours lecture.

College-level reading techniques and practice to enhance reading efficiency for academic, career, and personal growth. Application of comprehension, analysis, and interpretation skills to a range of challenging readings, including texts and primary-source materials from various cultural perspectives and across disciplines. This course may be linked with courses in other disciplines.

READ 100 Developmental Reading 5 Units

(Formerly Reading 91.)

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

Prerequisite: Qualifying score on the Reading Placement Test, a passing grade in Reading 201, or by referral.

Corequisite: Reading 100 students must also enroll in Reading 101.

Five hours lecture.

Pass-No Pass (P-NP) course.

Improve reading ability to read independently and effectively in work, academic, and personal environments.

READ 101 Guided Practice in Developmental Reading 1/2 Unit

Prerequisite: Qualifying score on the English Placement Test for Reading 100 or by successful completion of Reading 201 and 202, or Language Arts 200.

Corequisite: Reading 101 students must also enroll in Reading 100.

One hour lecture-laboratory.

Pass-No Pass (P-NP) course.

Development of college-level reading skills. Guided practice in reading and comprehending college-level reading materials.

READ 201 Reading Fundamentals 5 Units

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

Prerequisite: Qualifying score on Reading Placement Test or by referral.

Corequisite: Reading 201 students must also enroll in Reading 202.

Five hours lecture.

(May be taken twice for credit.)

Pass-No Pass (P-NP) course.

Introduction to everyday benefits of reading. Practice in applying reading methods to appropriate reading material. Learning strategies for improving reading.

READ 202 Guided Practice in Reading Fundamentals 1/2 Unit

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

Prerequisite: Qualifying score on English Placement Test for Reading 201.

Corequisite: Reading 202 students must also enroll in Reading 201.

One hour lecture-laboratory.

Pass-No Pass (P-NP) course.

Development of fundamental reading skills. Guided practice in reading and comprehending reading materials to prepare for Reading 100.

Real Estate**REST 50 Real Estate Principles 4 Units**

Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173; Mathematics 200 or 210.

Four hours lecture.

Fundamental principles of real estate: economics, law, working concepts, forms and terminology. Successful completion of the course provides eligibility to take the California Real Estate Salesperson examination.

REST 51 Real Estate Practices 4 Units

Prerequisite: Real Estate 50.

Four hours lecture.

Real Estate business practices: procedures, forms and contracts.

REST 52A Legal Aspects of Real Estate in California I 4 Units

Advisory: Real Estate 50.

(Also listed as Paralegal 52A. Student may enroll in either department, but not both, for credit.)

Four hours lecture.

California real property laws with emphasis on their practical application. Sources of real estate law; classes of property; fixtures; easements; estates or interest in real property; contracts of sale; covenants; conditions; and restrictions.

REST 52B Legal Aspects of Real Estate II 4 Units

Prerequisite: Real Estate 52A and a Real Estate Broker's License.

Four hours lecture.

An applied, advanced study of California real estate law emphasizing applicable rules relating to ownership, use and transfer of real property; the duties and responsibilities between broker, salesman and client; enforceability of contractual rights; and the impact of litigation affecting title to real property.

REST 53 Real Estate Finance 4 Units

Prerequisite: Real Estate 50.

Four hours lecture.

Regulations and procedures for financing real estate: types of lenders; primary and secondary investors; methods and guidelines for qualifying for real property loans.

REST 54 Real Estate Economics 4 Units

Prerequisite: Real Estate 50.

Four hours lecture.

Economic factors affecting real estate: urban development, renewal and regulation of land uses; business fluctuations and real estate cycles; mortgage market; commercial, industrial and residential income properties and trends; rural and special purposes properties and trends.

REST 56A Real Estate Appraisal I 4 Units

Prerequisite: Real Estate 50.

Four hours lecture.

Principles of real property valuation; sales market data, construction, methods of appraising; current trends and new technologies; uniform standards for appraising (USPAP), career opportunities.

REST 56B Real Estate Appraisal II 4 Units

Prerequisite: Real Estate 56A.

Four hours lecture.

Advanced analysis of property valuation; emphasis on site value and income capitalization as they relate to income producing properties. Statistical and traditional approaches of capitalization.

REST 59 Survey of Real Estate Property Management 4 Units

Prerequisite: Real Estate 50.

Four hours lecture.

Successful techniques and practices in the management of income property from acquisition to disposal; neighborhood analysis, rent schedules, renting, credit and collections, maintenance, insurance, tax considerations, pitfalls in the purchase of income property.

REST 61 Real Estate Investments 4 Units

Advisory: Real Estate 50.

Four hours lecture.

Real Estate investments including apartments, commercial and industrial buildings.

REST 97X Topics in Real Estate 2 Units**REST 97Y 3 Units**

Prerequisite: Background or experience in Real Estate appropriate to topic.

One hour lecture for each unit of credit.

(Any combination of Real Estate 97X and 97Y 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.

This course is designed to meet the Department of Real Estate's 45 clock hours of continuing education requirement for real estate licensees who renew their licenses after January 1, 1981.

Russian**RUSS 1 Elementary Russian (First Quarter) 5 Units**

Five hours lecture, one hour laboratory.

Oral and written practice in the minimum essentials of pronunciation, grammar, and syntax. Reading from simple prose. Language laboratory practice.

(RUSS 1 + 2 + 3, or RUSS 10 = CAN RUSS SEQ A)

R **RUSS 2 Elementary Russian (Second Quarter) 5 Units**
 (See general education pages for the requirement this course meets.)
Prerequisite: Russian 1 or one year of high school Russian.
Five hours lecture, one hour laboratory.
 Continuation of essentials of grammar and syntax. Intensive oral and written drills. Selected prose readings. Conversation and composition. Language laboratory practice.
 (RUSS 1 + 2 + 3, or RUSS 10 = CAN RUSS SEQ A)

RUSS 3 Elementary Russian (Third Quarter) 5 Units
Prerequisite: Russian 2 or two years high school Russian.
Five hours lecture, one hour laboratory.
 Continuation of Russian 2.
 (RUSS 1 + 2 + 3, or RUSS 10 = CAN RUSS SEQ A)

RUSS 4 Intermediate Russian (First Quarter) 5 Units
Prerequisite: Russian 3 or three years of high school Russian.
Five hours lecture.
 Review of grammar, including grammatical features beyond the elementary level. Intensive oral and written drills in idiomatic construction. Composition, conversation, and selected readings.
 (RUSS 4+5+6 = CAN RUSS SEQ B)

RUSS 5 Intermediate Russian (Second Quarter) 5 Units
Prerequisite: Russian 4 or four years of high school Russian.
Five hours lecture.
 Continuation of Russian 4.
 (RUSS 4+5+6 = CAN RUSS SEQ B)

RUSS 6 Intermediate Russian (Third Quarter) 5 Units
Prerequisite: Russian 5 or equivalent.
Five hours lecture.
 Continuation of Russian 5.
 (RUSS 4+5+6 = CAN RUSS SEQ B)

RUSS 10 Intensive First Year Russian 15 Units
One hundred and eighty lecture hours, thirty-six hours laboratory.
 An intensive eight week course providing oral and written practice in the essentials of pronunciation, grammar, and syntax of first-year Russian. Intensive oral and written drills, selected prose readings, conversation and composition.
 (RUSS 1 + 2 + 3, or RUSS 10 = CAN RUSS SEQ A)

RUSS 501 Skills Development in Speaking and Listening 0 Units
(Also listed as English as a Second Language 501, Speech Communication 501, and all foreign language classes offered by the Intercultural Studies Division. All foreign language classes listed will have a course number of 501. Student may enroll in only one department for credit.)
Five to fifty hours laboratory per quarter.
(No limit on repeatability for 0 unit classes.)
No grade (NG) course.
 Provides opportunities for students to practice and develop speech communication skills in a laboratory setting.

RUSS 502 Cross-cultural Partners 0 Units
(Also listed as English as a Second Language 502, English Writing 502, Speech Communication 502, and all foreign language classes offered by the Intercultural Studies Division. All foreign language classes listed will have a course number of 502. Student may enroll in only one department for credit.)
Five to fifty hours laboratory per quarter.
(No limit on repeatability for 0 unit classes.)
No grade (NG) course.
 Provides opportunities to practice listening and speaking skills with peers and to develop cross-cultural understanding.

Sign Language

SIGN 1 Elementary American Sign Language 5 Units
Advisory: English Writing 200 and Reading 201 (or Language Arts 200), or English as a Second Language 261, 262 and 263.
Five hours lecture.
 Development of and practice in elementary American Sign Language (ASL): preparation for acquiring a visual gestural language; finger spelling; vocabulary; modeling and use of basic grammatical structure. Beginning communication skills with emphasis on comprehension. Basic cultural aspects of deafness; historical and linguistic elements of sign language. Taught primarily in American Sign Language.

SIGN 2 Elementary American Sign Language (Second Quarter) 5 Units
 (See general education pages for the requirement this course meets.)
Prerequisite: Sign Language 1.
Five hours lecture.

Continuation of elementary American Sign Language (ASL) skills in targeted language functions: finger spelling; vocabulary; modeling and use of grammatical structure. Focus on greater communicative competence. Study of deaf culture and the development and linguistics of American Sign Language. Taught in American Sign Language.

SIGN 3 Elementary American Sign Language (Third Quarter) 5 Units
 (See general education pages for the requirement this course meets.)
Advisory: Sign Language 2.
Five hours lecture.

Continuation of elementary American Sign Language (ASL) skills in targeted language functions with focus on greater structural accuracy and communicative competence. Study of deaf culture and the development and linguistics of American Sign Language. Taught in American Sign Language.

Skills

(See other Reading courses under Skills.)

SKIL 100 Reading Skills 1/2 Unit
SKIL 100X 1 Unit

(Formerly Skills 100X and 100Y respectively.)
Credit course - Does not apply to De Anza Associate degree.
One hour lecture-laboratory for each one-half unit of credit.
(May be repeated six times for credit, as long as 12 units for all Skills courses are not exceeded.)
Pass-No Pass (P-NP) course.

An individualized program of instruction for students who want to improve their reading skills for academic or workplace environments. Focus on active reading, previewing techniques, textbook reading strategies, basic and critical comprehension, vocabulary in context, textbook reading strategies, and workplace reading. Students are evaluated and interviewed upon entering the class, and an individual program of assignments is developed to improve the reading skills needed.

SKIL 105 Vocabulary Skills 1/2 Unit

Credit course - Does not apply to De Anza Associate degree.
One hour lecture-laboratory.
(May be taken six times for credit.)
Pass-No Pass (P-NP) course.

An individualized program in vocabulary development designed to improve reading comprehension and the ability to communicate effectively when speaking and writing the English language.

SKIL 110 Basic Mathematic Skills 1/2 Unit

Credit course - Does not apply to De Anza Associate degree.
One hour lecture-laboratory.
(May be taken six times for credit.)
Pass-No Pass (P-NP) course.

An individualized program of instruction for students who want to improve their basic math skills for academic or workplace environments. Focus on study strategies for learning math and overcoming math anxiety, and addition, subtraction, multiplication and division using whole numbers, fractions, decimals, and percentages. Students are evaluated and interviewed upon entering the class, and an individual program of written and computer-assisted assignments is developed to improve the skills needed.

SKIL 120 Writing Skills 1/2 Unit
SKIL 120X 1 Unit

(Formerly Skills 120X and 120Y respectively.)
Credit course - Does not apply to De Anza Associate degree.
One hour lecture-laboratory for each one-half unit of credit.
(May be repeated as long as 12 units for all Skills courses is not exceeded.)
Pass-No Pass (P-NP) course.

A self-paced, individualized program of instruction for students who want to improve their writing skills for academic or workplace environments. Focus on writing process, paragraph development, organization, and sentence correctness. Students are evaluated and interviewed upon entering the class, and an individual program of assignments is developed to improve the writing skills needed.

SKIL 121 Spelling Skills 1/2 Unit

Credit course - Does not apply to De Anza Associate degree.
One hour lecture-laboratory.
(May be taken six times for credit.)
Pass-No Pass (P-NP) course.

An individualized program in developmental spelling that will improve the ability to express oneself more accurately and effectively in written communication.

SKIL 122	Grammar Skills	1/2 Unit	Small Business
SKIL 122X		1 Unit	
<i>(Formerly Skills 122X and 122Y respectively.)</i>			
<i>Credit course - Does not apply to De Anza Associate degree.</i>			
<i>One hour lecture-laboratory for each one-half unit of credit.</i>			
<i>(May be repeated as long as 12 units for all Skills courses is not exceeded.)</i>			
<i>Pass-No Pass (P-NP) course.</i>			
A self-paced, individualized program of instruction for students who want to improve their grammar skills for academic or workplace environments. Focus on fundamentals of English grammar, parts of speech, verb tenses, punctuation, sentence boundaries, and editing for sentence correctness. Students are evaluated and interviewed upon entering the class, and an individual program of assignments is developed to improve the grammar skills needed.			
SKIL 130	Study Skills	1/2 Unit	
SKIL 130X		1 Unit	
<i>(Formerly Skills 130X and 130Y respectively.)</i>			
<i>Credit course - Does not apply to De Anza Associate degree.</i>			
<i>One hour lecture-laboratory for each one-half unit of credit.</i>			
<i>(May be repeated as long as 12 units for all Skills courses is not exceeded.)</i>			
<i>Pass-No Pass (P-NP) course.</i>			
A self-paced, individualized program of instruction covering study skills such as time management, textbook reading, note taking, and test taking.			
SKIL 132	Adjunct Study Skills	1/2 Unit	
<i>Credit course - Does not apply to De Anza Associate degree.</i>			
<i>Corequisite: SKIL 132 students must be concurrently enrolled in an approved content course.</i>			
<i>One hour lecture-laboratory.</i>			
<i>(May be taken six times for credit.)</i>			
<i>Pass-No Pass (P-NP) course.</i>			
Small group collaborative instruction and individualized lab modules covering study skills appropriate to various content courses. Students learn, practice, and apply skills such as time management, textbook reading, note taking, and test taking to specific campus courses.			
SKIL 170	Job Skills	2 Units	
<i>Credit course - Does not apply to De Anza Associate degree.</i>			
<i>Advisory: English Writing 200 and Reading 201 (or Language Arts 200), or English as a Second Language 161 through 163; or English as a Second Language 251, 252, and 253.</i>			
<i>One hour lecture, two hours lecture-laboratory.</i>			
<i>(May be taken twice for credit.)</i>			
<i>Pass-No Pass (P-NP) course.</i>			
Vocational education skills course for entry level work force. Emphasis will be on application of SCANS basic skills of writing, reading, listening, speaking to applications necessary for students' successful interaction in the work force, including a self-inventory of workplace skills, conducting a career search interview, team building, and problem solving.			
SKIL 291	Listening/Speaking/Grammar Practice	1/2 Unit	
<i>(Formerly Skills 191.)</i>			
<i>Credit course - Does not apply to De Anza Associate degree.</i>			
<i>Advisory: English as a Second Language 244.</i>			
<i>(Also listed as English as a Second Language 291. Student may enroll in either department, but not both, for credit.)</i>			
<i>One and one-half hours laboratory.</i>			
<i>(Any combination of Skills 291 and English as a Second Language 291 may be taken six times for credit.)</i>			
<i>Pass-No Pass (P-NP) course.</i>			
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.			
SBUS 951	Accounting for Small Business		4 Units
<i>(Not open to students with credit for Accounting 1A.)</i>			
<i>Advisory: Computer Applications and Office Systems 70AA, and 100G; English Writing 200 and Reading 201 (or Language Arts 200), or English as a Second Language 261, 262 and 263; Mathematics 101 or 112.</i>			
<i>(Also listed as Accounting 60. Student may enroll in either department, but not both, for credit.)</i>			
<i>Four hours lecture.</i>			
Fundamentals of small business accounting systems.			
SBUS 95IA	Accounting for Small Business I		1 Unit
<i>(Not open to students with credit for Accounting 1A.)</i>			
<i>Advisory: Computer Applications and Office Systems 70AA, and 100G; English Writing 200 and Reading 201 (or Language Arts 200), or English as a Second Language 261, 262 and 263; Mathematics 101 or 112.</i>			
<i>(Also listed as Accounting 60A. Student may enroll in either department, but not both, for credit.)</i>			
<i>One hour lecture.</i>			
Fundamentals of small business accounting systems: analyzing transactions.			
SBUS 95IB	Accounting for Small Business II		1 Unit
<i>(Not open to students with credit for Accounting 1A.)</i>			
<i>Prerequisite: Small Business 95IA.</i>			
<i>(Also listed as Accounting 60B. Student may enroll in either department, but not both, for credit.)</i>			
<i>One hour lecture.</i>			
Fundamentals of small business accounting systems: journalizing, adjusting and posting.			
SBUS 95IC	Accounting for Small Business III		1 Unit
<i>(Not open to students with credit for Accounting 1A.)</i>			
<i>Prerequisite: Small Business 95IB.</i>			
<i>(Also listed as Accounting 60C. Student may enroll in either department, but not both, for credit.)</i>			
<i>One hour lecture.</i>			
Small business accounting systems: cash internal control and the accounting cycle.			
SBUS 95ID	Accounting for Small Business IV		1 Unit
<i>(Not open to students with credit for Accounting 1A.)</i>			
<i>Prerequisite: Small Business 95IC.</i>			
<i>(Also listed Accounting 60D. Student may enroll in either department, but not both, for credit.)</i>			
<i>One hour lecture.</i>			
Recording small merchandising business transactions in specialized journals.			
SBUS 95O	Small Business Export and Import		3 Units
<i>Three hours lecture.</i>			
Provides the small businessman with the basics of import and export management, use of the foreign freight forwarder and customs house broker, documents used in international trade, international banking and finance, sources of leads for international sales, insurance, governmental regulation.			
SBUS 97	Topics in Business		1/2 Unit
SBUS 97W			1 Unit
SBUS 97X			2 Units
SBUS 97Y			3 Units
SBUS 97Z			4 Units
<i>Credit course - Does not apply to De Anza Associate degree.</i>			
<i>Prerequisite: Background or experience in business appropriate to topic, or consent of instructor.</i>			
<i>(Also listed as Business 97-97Z. Student may enroll in either department, but not both, for credit.)</i>			
<i>One hour lecture for each unit of credit.</i>			
<i>(Any combination of Business/Small Business 97-97Z may be taken up to six times, not to exceed 18 units, as long as the topics/projects are different each time.)</i>			
A planned program of exposure to actual business practices designed to broaden students' perspective. Concepts and theories as applied to the specific topic.			
SBUS 150X	Bootcamp for Entrepreneurs		3 Units
<i>Credit course - Does not apply to De Anza Associate degree.</i>			
<i>Advisory: English Writing 200 and Reading 201 (or Language Arts 200), or English as a Second Language 261, 262 and 263.</i>			
<i>Three hours lecture.</i>			
Examination of topics relating to strategies for establishing, growing and sustaining a small business.			