BIOL 5 Biology of Birds 5 Units
(Formerly Biology 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, three hours laboratory, one additional hour to be arranged in the Science Center Resource Center (including Saturday field trips).
A general introduction to the biology of birds, including anatomy, physiology, ecology, evolution, behavior, diversity, identification, conservation, and relationships between birds and people around the world.

BIOL 6A Form and Function in the Biological World 6 Units
(See general education pages for the requirement this course meets.)
Prerequisite: Satisfactory score on the Chemistry Placement Exam, or grade of C or better in either Chemistry 1A or 50.
Advisory: English Writing 1A or English as a Second Language 5.
Four hours lecture, six hours laboratory, one additional hour to be arranged in the Science Center Resource Center.
Introduction to biology and the scientific method for students beginning the biology majors' series. Study of the structure and physiological processes of living organisms, with an emphasis on plants and animals.

BIOL 6B Cell and Molecular Biology 6 Units
Prerequisite: Biology 6A.
Advisory: English Writing 1A or English as a Second Language 5; Mathematics 105 or 114.
Four hours lecture, six hours laboratory, one additional hour to be arranged in the Science Center Resource Center.
Introduction to cellular structure and function, biological molecules, bioenergetics, and molecular genetics, and cell proliferation. The laboratory includes extensive hands-on experimentation in molecular biology.

BIOL 6C Evolution and Ecology 6 Units
Prerequisite: Biology 6B.
Advisory: English Writing 1A or English as a Second Language 5; Mathematics 105 or 114.
Four hours lecture, six hours laboratory, one additional hour to be arranged in the Science Center Resource Center.
Principles of evolution and ecology. Includes evolution within populations, the origin of species and higher taxa, and ecology at the levels of populations, communities, and ecosystems. The laboratory portion of the course includes hands-on research and a detailed look at how biology is done.

BIOL 8 Biology of Women 4 Units
(Formerly Biology 50.)
(See general education pages for the requirement this course meets.)
Advisory: English Writing 1A or English as a Second Language 5.
Four hours lecture, one additional hour to be arranged in the Science Center Resource Center.
This course is designed for non-science majors to explore women's anatomical and physiological characteristics and their management for good health. The emphasis is on the biological processes and principles organizing a "typical" female life progression, with a secondary focus on the structural and functional dimorphism of human body systems. It also aims at recognizing components of the scientific process distorted in the historical view of women and the impact that societal and cultural biases have on behavior and on female health issues.

BIOL 10 Introductory Biology 5 Units
(Not open to students who have completed Biology 6A, 6B, 6C, or equivalent.)
(See general education pages for the requirement this course meets.)
Advisory: English Writing 1A or English as a Second Language 5.
Four hours lecture, three hours laboratory, one additional hour to be arranged in the Science Center Resource Center.
An introduction to biology as a branch of the biological sciences and to its basic unifying principles, with selected application to the scientific method, evolutionary concepts, genetic modification, biotechnology, ecology, ecological crises and human impacts.

BIOL 11 Human Biology 5 Units
(Not open to students who have completed Biology 6A, 6B, or 6C, or equivalent.) (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, three hours laboratory, one additional hour to be arranged in the Science Center Resource Center.
A general introduction to biology and its principles, emphasizing the biology of humans. The course will cover the unifying principles of biology, with emphasis on the basic anatomy and physiology of the human body, as well as on contemporary health issues and their impacts on cultural, ethnic and gender groups.

BIOL 13 Marine Biology 5 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, three hours laboratory, one additional hour to be arranged in the Science Center Resource Center (two Saturday field trips).
Introduction to physical and chemical oceanography, marine animals, marine plants, and marine ecology with major emphasis on natural history of marine life. Bays, estuaries and open oceans are described as habitats. Marine biology as a branch of the biological sciences, employs the scientific method.

BIOL 15 California Ecology 5 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, three hours laboratory, one additional hour to be arranged in the Science Center Resource Center.
An introduction to ecology and field biology as a branch of the biological sciences and its relationship to the scientific method. A review of plants and animal adaptations to their natural environments and the impact of pollution, degradation of habitat, and human population, on life.

BIOL 26 Introductory Microbiology 6 Units
Prerequisite: Biology 40A, 40B and 40C, or equivalent, with a grade of C or better.
Four hours lecture, six hours laboratory, one additional hour to be arranged in the Science Center Resource Center.
Introduction to the sciences and the scientific method as exemplified by the study of microbiology. Morphology, metabolism, growth and genetics of bacteria and other microorganisms; chemical and physical means of control; the disease process and immunity. The importance of microorganisms to mankind; techniques and methods of microbiology.
(CAN BIOL 14)

BIOL 40A Human Anatomy and Physiology 5 Units
(Formerly Biology 47A.)
Prerequisite: Satisfactory score on the Biology 40A Placement Test or Chemistry 1A or Chemistry 50 or Chemistry 30A with a grade of C or better.
Advisory: English Writing 1A or English as a Second Language 5.
Four hours lecture, three hours laboratory, one additional hour to be arranged in the Science Center Resource Center.
An introduction to the disciplines of anatomy and physiology. Basic principles of human anatomy and physiology as exemplified in the study of cell chemistry, cell biology, histology and the integumentary, skeletal and muscular systems with emphasis on homeostatic mechanisms.

BIOL 40B Human Anatomy and Physiology 5 Units
(Formerly Biology 47B.)
Prerequisite: Biology 40A with a grade of C or better.
Four hours lecture, three hours laboratory, one additional hour to be arranged in the Science Center Resource Center.
Study of the nervous, circulatory, and respiratory systems.

BIOL 40C Human Anatomy and Physiology 5 Units
(Formerly Biology 47C.)
Prerequisite: Biology 40A and 40B with a grade of C or better.
Four hours lecture, three hours laboratory, one additional hour to be arranged in the Science Center Resource Center.
Study of the endocrine system, lymphatic system, digestive system, metabolism, urinary and reproductive systems, embryological development and classical Mendelian and modern biochemical genetics including genetic engineering.

BIOL 45 Introduction to Human Nutrition 4 Units
(Formerly Nutrition 58.)
Prerequisite: Biology 40C.
Advisory: English Writing 1A or English as a Second Language 5.
Four hours lecture, one additional hour to be arranged in the Science Center Resource Center.
Biological function and chemical classification of nutrients. Effects of nutritional deficiencies and excesses. Recommended nutrient intakes and the role of diet in the development of chronic disease.

BIOL 54G Applied Human Anatomy and Physiology: Levels of Organization 1 1/2 Units
(Formerly Biology 27G.)
(Not open to students with credit in Biology 6A, 6B, or 6C; or 40A, 40B, or 40C; or equivalent.)
Advisory: English Writing 200 and Reading 201 (or Language Arts 200), or English as a Second Language 261, 262 and 263.
One hour lecture, one and one-half hours laboratory, one additional hour to be arranged in the Science Center Resource Center.
Survey of human anatomy and physiology with emphasis on homeostatic limits of the human body. Topics to be discussed include basic introduction and body organization, chemical basis of life, the cell and its metabolism, tissues, and the skin. (Especially designed for students planning careers in medical assisting, Licensed Vocational Nursing, education, speech, home economics, psychology, physical education and/or recreation.)

BIOL 54H Applied Human Anatomy and Physiology: Support, Movement, and Integration 1 1/2 Units
(Formerly Biology 27H.)
(Not open to students with credit in Biology 6A, 6B, or 6C; or 40A, 40B, or 40C; or equivalent.)
Advisory: English Writing 200 and Reading 201 (or Language Arts 200), or English as a Second Language 261, 262 and 263.
One hour lecture, one and one-half hours laboratory, one additional hour to be arranged in the Science Center Resource Center.
Survey of human anatomy and physiology with emphasis on homeostatic limits of the human body. The skeletal, muscular and nervous systems including somatic and special senses. (Especially designed for students planning careers in medical assisting, Licensed Vocational Nursing, education, speech, home economics, psychology, physical education and/or recreation.)

BIOL 54I Applied Human Anatomy and Physiology: Coordination and Transport 1 1/2 Units
(Formerly Biology 27I.)
(Not open to students with credit in Biology 6A, 6B, or 6C; or 40A, 40B, or 40C; or equivalent.)
Advisory: English Writing 200 and Reading 201 (or Language Arts 200), or English as a Second Language 261, 262 and 263.
One hour lecture, one and one-half hours laboratory, one additional hour to be arranged in the Science Center Resource Center.
Survey of human anatomy and physiology with emphasis on homeostatic limits of the human body. The endocrine, cardiovascular, and lymphatic systems and the blood. (Especially designed for students planning careers in medical assisting, Licensed Vocational Nursing, education, speech, home economics, psychology, physical education and/or recreation.)

BIOL 54J Applied Human Anatomy and Physiology: Absorption, Excretion, and Reproduction 1 1/2 Units
(Formerly Biology 27J.)
(Not open to students with credit in Biology 6A, 6B, or 6C; or 40A, 40B, or 40C; or equivalent.)
Advisory: English Writing 200 and Reading 201 (or Language Arts 200), or English as a Second Language 261, 262 and 263.
One hour lecture, one and one-half hours laboratory, one additional hour to be arranged in the Science Center Resource Center.
Survey of human anatomy and physiology with emphasis on homeostatic limits of the human body. The respiratory, urinary, reproductive, and digestive systems, water and electrolyte balance, nutrition and pregnancy. (Especially designed for students planning careers in medical assisting, Licensed Vocational Nursing, education, speech, home economics, psychology, physical education and/or recreation.)

BIOL 55 Microbes and Society 4 Units
(This is a non-lab course.)
(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.
Four hours lecture, one additional hour to be arranged in the Science Center Resource Center.
Introduction to the study of microorganisms: their function, growth, control, survival and their impact on the environment and human health.

BIOL 77 Special Projects in Biology 1 Unit
BIOL 77X 2 Units
BIOL 77Y 3 Units
(Formerly Biology 49, 49X and 49Y.)
Prerequisite: Consent of instructor and division dean.
Three hours laboratory for each unit of credit.
(Any combination of Biology 77, 77X, and 77Y may be taken up to six times, not to exceed 18 units, as long as the topics/projects are different each time.)
Individual research in the biological sciences. Specific projects determined on consultation with the instructor. Outside reading and written report required.

BIOL 99B Coastal Redwoods 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.
Principles of coastal redwood ecology with selected applications to botanical characteristics, biogeography, interrelationships to close relatives and their ecology, historical patterns in the redwood range, economics and politics of timber harvest, recreational and educational usage of the redwood forests. Students will learn various strategies for teaching forestry concepts to various cultural, ethnic, and gender groups.

BIOL 200 Orientation to the Biological and Health Sciences Division's Learning Centers 1/2 Unit
(Formerly Biology 100.)
Credit course - Does not apply to De Anza Associate degree.
Advisory: Mathematics 200 or 210; English Writing 200 and Reading 201 (or Language Arts 200), or English as a Second Language 261, 262 and 263.
One hour lecture-laboratory, one additional hour to be arranged in the Science Center Resource Center.
(May be taken six times for credit.)
Designed as an open-entry, open-exit, self-paced course which will provide students with an overview of the learning resources available to them in the Biological and Health Sciences Division. It will also teach students some basic skills such as how to use a microscope and proper safety procedures in a laboratory class.

Biotechnology

(See Foothill College Catalog.)

Business

BUS 10 Introduction to Business 5 Units
(Formerly Business 20.)
Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173.
Five hours lecture.
Business and its functions in an economic and social system. Emphasis on understanding relationships among business, government, and consumer.

BUS 18 Business Law I 5 Units
Advisory: Business 10; English Writing 1A or English as a Second Language 5.
(Also listed as Paralegal 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, sales and agency laws, the impact of the legal system on business, and ethical considerations in the business environment.
(CAN BUS 12)

BUS 21 Business and Society 5 Units
(Formerly Business 51.)
(See general education pages for the requirement this course meets.)
Advisory: English Writing 1A or English as a Second Language 5; Economics 2.
Five hours lecture.
An introduction to the study of the interactions between business, government, and society. Course will examine many individual cases of conflict between business and society, both current and historical, and will guide students to explore the lessons these events hold for all current and future business managers.

BUS 54 Business Mathematics 5 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.
Five hours lecture.
Basic mathematical operations and concepts as related to business finance.

BUS 55 Introduction to Entrepreneurship 5 Units
(Formerly Small Business 95A.)
Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173.
Five hours lecture.
A practical study of the operations and essential skills required in small and start-up businesses. Emphasis on the opportunities and problems faced by entrepreneurs in meeting competition, purchasing, selling, staffing and financing an independent business. This course will prepare students for developing business plans.

BUS 56 Human Relations in Business 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.
Human relations behavior in business organizations emphasizing personal and interpersonal relationships; developing leadership for business success; future trends.

BUS 57 Personnel Management 4 Units
(Formerly Business 57A.)
Advisory: Business 10 or Business 96A; Mathematics 200 or 210; English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173.
Four hours lecture.
Personnel administration: recruitment, selection, placement, development, and maintenance of the work force to meet individual, organizational diversity, and societal objectives.

BUS 58 The Business Plan 3 Units
(Formerly Small Business 95F.)
Advisory: Business 55.
Three hours lecture.
Effectively organize the resources required to establish a new business and obtain financing by writing an analysis of the prospective business enterprise.

BUS 60 International Business Management 5 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.
Five hours lecture.
International Business and its functions in a global economy. Understanding cross-border trade and investment; distance, time zone and language issues; national differences in government regulation, culture and business systems.

BUS 61 Introduction to Technical Writing 4 Units
Prerequisite: English Writing 1A or English as a Second Language 5.
(Also listed as English Writing 61 and Technical Writing 61. Student my enroll in only one department for credit.)
Four hours lecture.
Technical writing skills focusing on basic techniques of exposition for the technical field, functional description, process writing, technical vocabulary, correct usage, and accurate editing.

BUS 62 Survey of Technical Writing 4 Units
Prerequisite: Business/English Writing/Technical Writing 61 (may be taken concurrently).
(Also listed as English Writing 62 and Technical Writing 62. Student may enroll in only one department for credit.)
Four hours lecture.
Technical writing skills focusing on short document formats, production of sections of various technical documents, and incorporation of graphics within text.

BUS 63 Technical Publications 4 Units
Prerequisite: Business/English Writing/Technical Writing 61.
(Also listed English Writing 63 and Technical Writing 63. Student may enroll in only one department for credit.)
Four hours lecture.
Technical writing and editing skills applied through individual and group assignments with emphasis on planning, scheduling, and producing longer reports, manuals, and instructions. Development of organizational skills and individual documentation solutions.

BUS 64 Technical Writing Seminar 4 Units
Prerequisite: Business/English Writing/Technical Writing 62 or 63.
(Also listed as English Writing 64 and Technical Writing 64. Student may enroll in only one department for credit.)
Four hours lecture.
Technical communication and editing skills applied through the preparation and presentation of a complete document according to the standards of the student's chosen technical field.

BUS 65 Leadership 5 Units
Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173.
Five hours lecture.
Developing effectiveness in leadership situations and understanding the complex challenges of leadership. Adapting leadership techniques to build successful relationships in a culturally diverse world.

BUS 67A Federal Income Tax 4 Units
(Formerly Business 67.)
Advisory: Accounting 1A or 60 (may be taken concurrently); English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173 ; Mathematics 101 or 112.
(Also listed as Accounting 67A. Student may enroll in either department, but not both, for credit.)
Four hours lecture.
A study of current federal income tax law and the procedures for preparing an individual's tax return.

BUS 67B Advanced Individual Income Tax: California Emphasis 4 Units
(Formerly Business 68A.)
Prerequisite: Accounting 67A or Business 67A.
Advisory: Accounting 1A or 60; English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173.
(Also listed as Accounting 67B. Student may enroll in either department, but not both, for credit.)
Four hours lecture.
Advanced study of current federal income tax law and California income tax law as it relates to individuals.

BUS 69 Investment Fundamentals 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.
Introduction to securities investment; securities characteristics and rights; selection and purchase of stock; analysis of financial statements; investment methods; technical market and stock analysis; impact on financial planning.

BUS 70 Principles of E-Business 4 Units
Four hours lecture.
Theory and practice of effectively conducting and managing business over the Internet. Insights into e-business models, technology, auctions, and marketing. Students are expected to complete computer assignments.

BUS 79 Business Strategy 4 Units
Advisory: Computer Applications and Office Systems 94 or Computer Information Systems 94; any E-Business course; 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.
Strategic planning and management of Internet and traditional businesses. The analysis of industry competition. How to develop a strategic plan and how its implementation can impact a firm's competitive success. A view of business from the perspective of the CEO.

BUS 79A Strategic Management in the Automotive Repair Business 2 Units
Two hours lecture.
Learn to successfully play the ServiceSim simulation game, originally developed by Honda to train its Parts and Service Department managers.

BUS 80 Effective Organizational Communication 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 Speech 70. Student may enroll in either department, but not both, for credit.)
Four hours lecture.
A study of organizational communication concepts and theories. Impact of networks, superior/subordinate message patterns, team building, climate, cultural and gender influences, communication technology, ethics, and globalization on organizational effectiveness. Emphasizes development of communication skills useful for working productively in a dynamic, collaborative, multicultural work environment.

BUS 82 Business Data Communication 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.
Data communication and networking in business.

BUS 85 Business Communication 3 Units
Advisory: Computer Applications and Office Systems 84A and 84B; English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173.
Three hours lecture.
Application of writing skills to business communications; public relations functions of business correspondence.

BUS 87 Introduction to Selling 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.
Application of business and behavioral sciences in a selling environment. Building successful relationships in a culturally diverse world.

BUS 88 Managing Technology Projects 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 Computer Information Systems 79. Student may enroll in either department, but not both, for credit.)
Four hours lecture, three hours laboratory.
Introduction to the theory and practice of the design and management of technology projects including planning, performing, and monitoring of projects. Subjects explored are estimating costs and schedules, analyzing client expectations, guiding diverse groups of people toward a common goal, while earning a profit. Use of common software packages for project management.

BUS 89 Advertising 5 Units
Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173.
Five hours lecture.
Historical, economic, and social aspects of advertising: role of the advertising agency; media alternatives and the development of creative advertising copy; development of advertising budgets; analysis of successful advertising campaigns.

BUS 90 Principles of Marketing 5 Units
(Formerly Business 90A.)
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 hours lecture.
Fundamentals of marketing: product planning and development; pricing strategies; marketing channels.

BUS 91 Introduction to Personal Finance 3 Units
Three hours lecture.
Students are introduced to a range of personal financial planning fundamentals including spending habits, taxes, saving, investing, and insurance. Discussion will include planning for major life events such as paying for college, buying a home, and retiring comfortably.

BUS 93 Consumer Behavior 3 Units
Advisory: Business 90.
Three hours lecture.
Examination of the central economic and social roles consumers play in developed market economies. From a marketing perspective, the course analyzes: 1) how consumers judge and choose from the variety of products and services offered in competitive markets, 2) the factors that influence shopping and buying, and 3) how people use, enjoy (or not) and dispose of their purchases.

BUS 95 Project Manager - Your Role 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.
Focus on your role as a Project Manager; selecting a project; selecting a team; documentation and tracking of a project.

BUS 95A Project Management - A Practicum 5 Units
Prerequisite: Business 10 or equivalent experience.
Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173.
Five hours lecture.
Focus on your role as a Project Manager; selecting a project; selecting a team; documentation and tracking of a project using Project Manager Book of Knowledge (PMBOK) Theory.

BUS 96A Principles of Management 5 Units
Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173.
Five hours lecture.
Roles, functions, and responsibilities of management; the external environments and their impact on management.

BUS 97 Topics in Business 1/2 Unit
BUS 97W 1 Unit
BUS 97X 2 Units
BUS 97Y 3 Units
BUS 97Z 4 Units
Credit course - Does not apply to De Anza Associate degree.
Prerequisite: Background or experience in business appropriate to topic, or consent of instructor.
One hour lecture for each unit of credit.
(Any combination of Business 97-97Z may be take up to six times, not to exceed 18 units, as long as the topics/projects are different each time.)
A planned program of exposure to actual business practices designed to broaden students' perspective. Concepts and theories as applied to the specific topic.

CAD and Digital Imaging

CDI 51 Geometric Dimensioning and Tolerancing 2 Units
(Formerly CAD and Digital Imaging 51C.)
Four hours lecture-laboratory.
Geometric dimensioning and tolerancing, utilizing ANSI Y 14.5M Standards as they apply to engineering and manufacturing drawings and machining.

CDI 56 Special Projects in CAD 1 Unit
CDI 56X 2 Units
CDI 56Y 3 Units
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 CAD and Digital Imaging 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 CAD.

CDI 57A Simultaneous Product Development 4 Units
Eight hours lecture-laboratory.
Product design using 3D CAD software. Application of simultaneous product development and design.

CDI 57B Simultaneous Product Development 4 Units
Eight hours lecture-laboratory.
Product design using 3D CAD software. Application of simultaneous product development and design.

CDI 60A SolidWorks (Beginning) 4 Units
(Formerly CAD and Digital Imaging 60.)
Eight hours lecture-laboratory.
Fundamentals of computer-aided design and drafting using SolidWorks software. Application of SolidWorks in creating manufacturing models.

CDI 60B SolidWorks (Beginning) 4 Units
Eight hours lecture-laboratory.
Fundamentals of computer-aided design and drafting using SolidWorks software. Application of SolidWorks in creating manufacturing models.

CDI 61A SolidWorks (Intermediate) 4 Units
(Formerly CAD and Digital Imaging 61.)
Prerequisite: CAD and Digital Imaging 60A-L.
Eight hours lecture-laboratory.
Intermediate-level application of SolidWorks in creating solid models and drawings. Introduction to surface features and basic surfacing techniques.

CDI 61B SolidWorks (Intermediate) 4 Units
Prerequisite: CAD and Digital Imaging 60A-L.
Eight hours lecture-laboratory.
Intermediate-level application of SolidWorks in creating solid models and drawings. Introduction to surface features and basic surfacing techniques.

CDI 62A SolidWorks (Advanced) 4 Units
(Formerly CAD and Digital Imaging 62.)
Prerequisite: CAD and Digital Imaging 61A-L.
Eight hours lecture-laboratory.
Advanced CAD modeling techniques using SolidWorks. Emphasis is on surface modeling and "top-down" design.

CDI 62B SolidWorks (Advanced) 4 Units
Prerequisite: CAD and Digital Imaging 61A-L.
Eight hours lecture-laboratory.
Advanced CAD modeling techniques using SolidWorks. Emphasis is on surface modeling and "top-down" design.

CDI 70A Pro/ENGINEER Wildfire 2.0 (Beginning) 4 Units
(Formerly CAD and Digital Imaging 70.)
Eight hours lecture-laboratory.
Fundamentals of part design, using Pro/ENGINEER. Application of operating system, software, hardware, and peripherals in creating 3-D manufacturing models with Pro/ENGINEER.

CDI 70B Pro/ENGINEER Wildfire 3.0 (Beginning) 4 Units
Eight hours lecture-laboratory.
Fundamentals of part design, using Pro/ENGINEER. Application of operating system, software, hardware, and peripherals in creating 3-D manufacturing models with Pro/ENGINEER.

CDI 71A Pro/ENGINEER Wildfire 2.0 (Intermediate) 4 Units
(Formerly CAD and Digital Imaging 71.)
Prerequisite: CAD and Digital Imaging 70A-L.
Eight hours lecture-laboratory.
Assembly creation and drawing output using Pro/ENGINEER.

CDI 71B Pro/ENGINEER Wildfire 3.0 (Intermediate) 4 Units
Prerequisite: CAD and Digital Imaging 70A-L.
Eight hours lecture-laboratory.
Assembly creation and drawing output using Pro/ENGINEER.

CDI 72A Pro/ENGINEER Wildfire 2.0 (Advanced) 4 Units
(Formerly CAD and Digital Imaging 72.)
Prerequisite: CAD and Digital Imaging 71A-L.
Eight hours lecture-laboratory.
Advanced CAD using Pro/ENGINEER including fixture design, and manufacturing using Pro/NC, and Expert Machinist.

CDI 72B Pro/ENGINEER Wildfire 3.0 (Advanced) 4 Units
Prerequisite: CAD and Digital Imaging 71A-L.
Eight hours lecture-laboratory.
Advanced CAD using Pro/ENGINEER including fixture design, and manufacturing using Pro/NC, and Expert Machinist.

CDI 73A Pro/ENGINEER Wildfire 2.0 (Pro/SHEETMETAL) 4 Units
(Formerly CAD and Digital Imaging 73.)
Prerequisite: CAD and Digital Imaging 70A-L.
Eight hours lecture-laboratory.
Principles of sheet metal design using Pro/ENGINEER Pro/SHEETMETAL.

CDI 73B Pro/ENGINEER Wildfire 3.0 (Pro/SHEETMETAL) 4 Units
Prerequisite: CAD and Digital Imaging 70A-L.
Eight hours lecture-laboratory.
Principles of sheet metal design using Pro/ENGINEER Pro/SHEETMETAL.

CDI 74A Pro/ENGINEER Wildfire 2.0 (Pro/SURFACE) 4 Units
(Formerly CAD and Digital Imaging 74.)
Prerequisite: CAD and Digital Imaging 71A-L.
Eight hours lecture-laboratory.
Surface design using Pro/ENGINEER software. Application of Surfaces in creating product models for industry.

CDI 74B Pro/ENGINEER Wildfire 3.0 (Pro/SURFACE) 4 Units
Prerequisite: CAD and Digital Imaging 71A-L.
Eight hours lecture-laboratory.
Surface design using Pro/ENGINEER software. Application of Surfaces in creating product models for industry.

CDI 75A Pro/ENGINEER Wildfire 2.0 (Pro/MOLD) 4 Units
(Formerly CAD and Digital Imaging 75.)
Prerequisite: CAD and Digital Imaging 71A-L.
Eight hours lecture-laboratory.
Pro/MOLD design using Pro/ENGINEER software. Application of Pro/MOLD in creating manufacturing models.

CDI 75B Pro/ENGINEER Wildfire 3.0 (Pro/MOLD) 4 Units
Prerequisite: CAD and Digital Imaging 71A-L.
Eight hours lecture-laboratory.
Pro/MOLD design using Pro/ENGINEER software. Application of Pro/MOLD in creating manufacturing models.

CDI 76A Pro/ENGINEER Wildfire 2.0 (Pro/CABLE) 4 Units
(Formerly CAD and Digital Imaging 76.)
Prerequisite: CAD and Digital Imaging 71A-L.
Eight hours lecture-laboratory.
Pro/CABLE Design using Pro/ENGINEER software. Application of Pro/CABLE in creating manufacturing models.

CDI 76B Pro/ENGINEER Wildfire 3.0 (Pro/CABLE) 4 Units
Prerequisite: CAD and Digital Imaging 71A-L.
Eight hours lecture-laboratory.
Pro/CABLE Design using Pro/ENGINEER software. Application of Pro/CABLE in creating manufacturing models.

CDI 77A Pro/ENGINEER Wildfire 2.0 (Pro/MECHANICA) 4 Units
Prerequisite: CAD and Digital Imaging 71A-L.
Eight hours lecture-laboratory.
Application of Pro/MECHANICA to validate and optimize 3D models by measuring stress and displacement distributions of new designs through simulating responses to structural loads.

CDI 77B Pro/ENGINEER Wildfire 3.0 (Pro/MECHANICA) 4 Units
Prerequisite: CAD and Digital Imaging 71A-L.
Eight hours lecture-laboratory.
Application of Pro/MECHANICA to validate and optimize 3D models by measuring stress and displacement distributions of new designs through simulating responses to structural loads.

CDI 79A Pro/ENGINEER Wildfire 2.0 (Pro/ Update) 4 Units
Prerequisite: CAD and Digital Imaging 70A-L.
Eight hours lecture-laboratory.
Principles and application changes in the Pro/ENGINEER software system. Designed to upgrade users to the latest version yearly.

CDI 79B Pro/ENGINEER Wildfire 3.0 (Pro/ Update) 4 Units
Prerequisite: CAD and Digital Imaging 70A-L.
Eight hours lecture-laboratory.
Principles and application changes in the Pro/ENGINEER software system. Designed to upgrade users to the latest version yearly.

CDI 80A AutoCAD (Beginning) 4 Units
(Formerly CAD and Digital Imaging 52A.)
Eight hours lecture-laboratory.
Principles and applications of computer-aided design and drafting using AutoCAD software. Emphasis on 2-D drawings and dimensioning.

CDI 80B AutoCAD (Beginning) 4 Units
Eight hours lecture-laboratory.
Principles and applications of computer-aided design and drafting using AutoCAD software. Emphasis on 2-D drawings and dimensioning.

CDI 81A AutoCAD (Intermediate) 4 Units
(Formerly CAD and Digital Imaging 53A.)
Prerequisite: CAD and Digital Imaging 52A-L.
Eight hours lecture-laboratory.
Intermediate mechanical design using AutoCAD software. Emphasis is on the CAD design process and drawing production. Drawings will be produced in 2-D and 3-D.

CDI 81B AutoCAD (Intermediate) 4 Units
Prerequisite: CAD and Digital Imaging 52A-L.
Eight hours lecture-laboratory.
Intermediate mechanical design using AutoCAD software. Emphasis is on the CAD design process and drawing production. Drawings will be produced in 2-D and 3-D.

CDI 85A AutoDesk Inventor 4 Units
(Formerly CAD and Digital Imaging 54A.)
Eight hours lecture-laboratory.
Fundamentals of computer-aided design and drafting using AutoDesk Inventor software. Application of Inventor in creating manufacturing models.

CDI 85B AutoDesk Inventor 4 Units
Eight hours lecture-laboratory.
Fundamentals of computer-aided design and drafting using AutoDesk Inventor software. Application of Inventor in creating manufacturing models.

CDI 100 CAD Technology Laboratory 1/2 Unit
CDI 100X 1 Unit
CDI 100Y 1 1/2 Units
CDI 100Z 2 Units
Credit course - Does not apply to De Anza Associate degree.
Corequisite: Any CAD and Digital Imaging course.
Three hours laboratory for each unit of credit.
(Any combination of CAD and Digital Imaging 100, 100X, 100Y, and 100Z may be taken up to six times, not to exceed 18 units.)
Pass-No Pass (P-NP) course.
Use of CAD Technology labs for those who need/desire more time to complete application assignments.

CDI 112A Digital Imaging Software (Photoshop) 4 Units
(Student may receive credit for either CAD and Digital Imaging/Computer Applications and Office Systems/Arts 112A-H; or 112I-P and 112Q-Z.)
Advisory: English Writing 200 and Reading 201 (or Language Arts 200), or English as a Second Language 261, 262 and 263; Computer Applications and Office Systems 94 or Computer Information Systems 94; Computer Applications and Office Systems 102T.
(Also listed as Arts112A and Computer Applications and Office Systems 112A. Student may enroll in only one department for credit.)
Eight hours lecture-laboratory.
Pass-No Pass (P-NP) course.
Basic and intermediate principles using digital imaging software to produce graphics for Web sites. Introduction to digital imaging terminology and software. This course is for the content person to produce Web pages using digital images.

CDI 112I Digital Imaging Software I (Photoshop) 2 Units
(Student may receive credit for either CAD and Digital Imaging/Computer Applications and Office Systems/Arts 112 A-H; or 112 I-P and 112 Q-Z.)
Advisory: English Writing 200 and Reading 201 (or Language Arts 200), or English as a Second Language 261, 262 and 263; Computer Applications and Office Systems 94 or Computer Information Systems 94; Computer Applications and Office Systems 102T.
(Also listed as Arts 112I and Computer Applications and Office Systems 112I. Student may enroll in only one department for credit.)
Four hours lecture-laboratory.
Pass-No Pass (P-NP) course.
Basic principles of using digital imaging software to produce graphics for Web sites. Introduction to digital imaging terminology and software. This course is for the content person to produce Web pages using digital images.

CDI 112Q Digital Imaging Software II (Photoshop) 2 Units
(Student may receive credit for either CAD and Digital Imaging/Computer Applications and Office Systems/Arts 112 A-H; or 112 I-P and 112 Q-Z.)
Advisory: English Writing 200 and Reading 201 (or Language Arts 200), or English as a Second Language 261, 262 and 263; Computer Applications and Office Systems 112 I-P, or equivalent.
(Also listed as Arts 112Q and Computer Applications and Office Systems 112Q. Student may enroll in only one department for credit.)
Four hours lecture-laboratory.
Pass-No Pass (P-NP) course.
Basic and intermediate principles of using digital imaging software to produce graphics for Web sites. Introduction to digital imaging terminology and software. This course is for the content person to produce Web pages using digital images.

CDI 114A Web Graphics/Animation Software (Flash) 4 Units
(Student may receive credit for either CAD and Digital Imaging/Computer Applications and Office Systems/Arts 114 A-H; or 114 I-P and 114 Q-Z.)
Advisory: English Writing 200 and Reading 201 (or Language Arts 200), or English as a Second Language 261, 262 and 263; Computer Applications and Office Systems 112 A-H or Computer Applications and Office Systems 112 I-P; and 112 Q-Z or equivalent.
(Also listed as Arts 114A and Computer Applications and Office Systems 114A. Student may enroll in only one department for credit.)
Six hours lecture-laboratory.
Pass-No Pass (P-NP) course.
Basic and intermediate principles of graphics/animation for the Web. Web graphics/animation terminology and software. This course is for the content person to build a Web site.

CDI 116A Web Development Graphics Software (Illustrator) 4 Units
(Student may receive credit for either CAD and Digital Imaging/Computer Applications and Office Systems/Arts 116A-H, or 116I-P and 116Q-X.)
Prerequisite: CAD and Digital Imaging/Computer Applications and Office System/Arts 112A-H; or CAD and Digital Imaging/Computer Applications and Office Systems/Arts 112I-P and 112Q-X.
Advisory: English Writing 200 and Reading 201 (or Language Arts 200), or English as a Second Language 261, 262 and 263.
(Also listed as Arts 116A and Computer Applications and Office Systems 116A. Student may enroll in only one department for credit.)
Eight hours lecture-laboratory.
Pass-No Pass (P-NP) course.
Basic and intermediate principles of using vector-based graphics software to produce graphics for Web sites. Introduction to vector-based graphics terminology and software. This course is for the content person to produce vector graphic images.

CDI 117A Advanced Digital Imaging Software (Photoshop) 3 Units
Prerequisite: Arts/CAD and Digital Imaging/Computer Applications and Office Systems 112A-H.
Advisory: Computer Applications and Office Systems 90G; English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173.
(Also listed as Arts 117A and Computer Applications and Office Systems 117A. Student may enroll in only one department for credit.)
Six hours lecture-laboratory.
Pass-No Pass (P-NP) course.
Advanced principles and techniques of using digital imaging software to produce graphics for Web sites and printed media. Integration of digital imaging software with Web authoring software. This course is for the content person to produce digital images for Web pages and print media.

CDI 118A Advanced Web Graphics/ Animation Software (Flash) 3 Units
Prerequisite: Arts/CAD and Digital Imaging/Computer Applications and Office Systems 114A-H.
Advisory: Computer Applications and Office Systems 90G; English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 172 and 173.
(Also listed as Arts 118A and Computer Applications and Office Systems 118A. Student may enroll in only one department for credit.)
Six hours lecture-laboratory.
Pass-No Pass (P-NP) course.
An advanced Flash course that is projects and portfolio based and taught from a designer perspective. Students will be taught how to build a portfolio and animated multimedia presentation. Basic programming skills will be taught along with developing interactive web-based multimedia presentations using ActionScripts, sound, and graphics.

Cantonese

CANT 1 Elementary Cantonese (First Quarter) 5 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.
Five hours lecture, one hour laboratory.
Cantonese language and culture of Southeast China in the region of Guandung Province is presented and studied. Basic speaking, listening, reading and writing of Cantonese will be introduced within a cultural context. Emphasis will be on language as an expression of culture. Language laboratory practice will be a part of the regular instruction to reinforce pronunciation, grammar, syntax and conversation.

CANT 2 Elementary Cantonese (Second Quarter) 5 Units
(See general education pages for the requirement this course meets.)
Prerequisite: Cantonese 1.
Five hours lecture, one hour laboratory.
Presentation and study of Cantonese language and culture of Guandung Province. Basic speaking, listening, reading and writing of Cantonese will be introduced within a cultural context. Emphasis will be on language as an expression of culture. Language laboratory practice will be a part of the regular instruction to reinforce pronunciation, grammar, syntax and conversation. Further development of material is presented in Cantonese 1.

CANT 3 Elementary Cantonese (Third Quarter) 5 Units
(See general education pages for the requirement this course meets.)
Prerequisite: Cantonese 2.
Five hours lecture, one hour laboratory.
Presentation and study of Cantonese language and culture of Guandung Province. Basic speaking, listening, reading and writing of Cantonese will be introduced within a cultural context. Emphasis will be on language as an expression of culture. Language laboratory practice will be a part of the regular instruction to reinforce pronunciation, grammar, syntax and conversation. Further development of material is presented in Cantonese 2.

Career Life Planning

CLP 70 Self-Assessment 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.
Examine the decision-making process by exploring theories in career development and other factors such as familial, social and cultural issues that influence career and lifestyle choices. Utilize self-assessment inventories to identify individual interests, values, skills and personality types as they relate to career/college major options. Become familiar with career development software, related technology and develop skills to enhance the job search process.

CLP 75 College Major and Career Options 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.
Pass-No Pass (P-NP) course.
Identify your compatible college majors and career options by completing a variety of self-assessment inventories. Examine how individual, family, social, and cultural perspectives influence the college major and career decision-making process. Review college major and career myths, the purpose and structure of higher education, and organizational structures found in employment settings.