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such exploring community resources or investigating a common teaching practice for effectiveness.

(The course meets NAECY Standard 4c, Understanding Content Knowledge in ECE and Standard 5, Becoming a Professional; NPBTS Standards IX, Reflective Practice; and DOC-ECCE Standard 9 Professional & Ethical Practice.

C D 80  Design, Program Development, and Daily Operation of Family Child Care

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

Three hours lecture (36 hours total per quarter).

An overview of family childcare as a business and as a program for children. Starting your own childcare business, budget and contracts, licensing and safety requirements will be addressed. Relevant program issues such as designing indoor/outdoor environments, daily schedule, curriculum, child guidance, accommodations for all children and parent partnerships will be presented.

C D 90  Facilitating Inclusion in Early Childhood Programs: Intervention Strategies

Prerequisite: Child Development 10G and 60.

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

Three hours lecture (36 hours total per quarter).

Expands upon a student's ability to work effectively with all children in early childhood programs and more specifically with infants, toddlers and preschoolers with disabilities and other special needs in inclusive environments. Focus will include theories, research, and practical applications of best practices from both the fields of Early Childhood Education and Early Intervention/Early Childhood Special Education. Students will learn to design practical and effective intervention strategies for individual children with special needs within the context of natural environments and will learn to work in collaboration with IFSP/IEP teams.

(This course meets NAECY Standards 1a, 1c, 2a, 3a, 3d, 4b; CEC/DEC Standards CC3-K4, CCK-K, CC4-S1-6, EC4-S1-3, CC5-K3, CC5-S1-5; and NPBTS Standards 2 and 4.)

C D 101W  Current Issues in Child Development

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

One hour lecture for each unit of credit (12 hours total for each unit of credit per quarter).

Any combination of Child Development 101W, 101X, 101Y and 101Z may be taken up to six times, not to exceed 18 units, as long as the units/projects are different each time.

In-service workshops for teachers, aides, and parent volunteers to increase awareness of contemporary professional issues in Child Development.

C D 102W  Curriculum for Child Development Personnel

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

One hour lecture for each unit of credit (12 hours total for each unit of credit per quarter).

Any combination of Child Development 102W, 102X, 102Y and 102Z may be taken up to six times, not to exceed 18 units, as long as the units/projects are different each time.

In-service workshop for teachers, aides, and parent volunteers to improve skills and knowledge in the area of curriculum for Child Development personnel.

C D 103W  Topics in Preschool Program Administration

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

One hour lecture for each unit of credit (12 hours total for each unit of credit per quarter).

Any combination of Child Development 103W, 103X, 103Y and 103Z may be taken up to six times, not to exceed 18 units, as long as the topics are different each time.

In-service workshop for program directors, site supervisors, head teachers, or others with administrative or supervisory responsibility to improve skills and knowledge in the area of Child Development program administration.

C D 103X  2 Units

C D 103Y  3 Units

C D 103Z  4 Units

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

Three hours lecture (36 hours total per quarter).

An overview of family childcare as a business and as a program for children. Starting your own childcare business, budget and contracts, licensing and safety requirements will be addressed. Relevant program issues such as designing indoor/outdoor environments, daily schedule, curriculum, child guidance, accommodations for all children and parent partnerships will be presented.

CAOS 70AA  Elementary Keyboarding I  1 1/2 Units

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

Three hours lecture-laboratory (36 hours total per quarter).

Any combination of Computer Applications and Office Systems 70A, 70AA and 70AB may be taken up to six times, not to exceed 18 units, for credit for the family of courses.

Pass-No Pass (P-NP) course.

Basic keyboarding skills and techniques.

CAOS 81H  10-key and Electronic Calculator  1 Unit

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

Two hours lecture-laboratory (24 hours total per quarter).

Basic 10-key skills and techniques in the use of the electronic calculator.

CAOS 84A  Business English I  2 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272-273; Mathematics 114 or equivalent.

Four hours lecture-laboratory (48 hours total per quarter).

Pass-No Pass (P-NP) course.

Review of English grammar, punctuation, usage, and writing skills and applications of these skills to basic business communications.

CAOS 90G  Computer Literacy (PC)  4 Units

Students may take either Computer Applications and Office Systems 90G or, 90GA and 90GB, but not both for credit.)

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

Eight hours lecture-laboratory (96 hours total per quarter).

Pass-No Pass (P-NP) course.

Introduction to a computer - hardware and software. Theory and hands-on activities using word processing, spreadsheet, presentation graphics, database, e-mail, operating systems, and Internet applications.

CAOS 90GA  Computer Literacy I (PC)  2 Units

Students may take either Computer Applications and Office Systems 90G or, 90GA and 90GB, but not both for credit.)

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

Four hours lecture-laboratory (48 hours total per quarter).

Pass-No Pass (P-NP) course.

Introduction to a computer - hardware and software. Theory and interactive learning activities using word processing, spreadsheet, presentation graphics, database, e-mail, operating systems, and Internet applications.

CAOS 90GB  Computer Literacy II (PC)  2 Units

Students may take either Computer Applications and Office Systems 90G or, 90GA and 90GB, but not both for credit.)

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

Four hours lecture-laboratory (48 hours total per quarter).

Pass-No Pass (P-NP) course.

Introduction to a computer - hardware and software. Hands-on activities using word processing, spreadsheet, presentation graphics, database, e-mail, operating systems, and Internet applications.

CAOS 91AL  Word Processing I (Word XP/2002)  2 Units

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

Four hours lecture-laboratory (48 hours total per quarter).

Pass-No Pass (P-NP) course.

Concepts and applications using a word processing computer software program.

CAOS 91AM  Word Processing I (Word 2007)  2 Units

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

Four hours lecture-laboratory (48 hours total per quarter).

Pass-No Pass (P-NP) course.

Concepts and applications using a word processing computer software program.

CAOS 91AN  Word Processing I (Word 2010)  2 Units

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

Four hours lecture-laboratory (48 hours total per quarter).

Pass-No Pass (P-NP) course.

Concepts and applications using a word processing computer software program.

All courses are for unit credit and apply to a De Anza associate degree unless otherwise noted. 2011-2012 De Anza College Catalog
CAOS 91BL  Word Processing II (Word XP/2002)  2 Units
Prerequisite: Computer Applications and Office Systems 91AL.
Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263.
Four hours lecture-laboratory (48 hours total per quarter).
Pass-No Pass (P-NP) course.
Advanced word processing concepts and applications using a computer software program.

CAOS 91BM  Word Processing II (Word 2007)  2 Units
Prerequisite: Computer Applications and Office Systems 91AM.
Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263.
Four hours lecture-laboratory (48 hours total per quarter).
Pass-No Pass (P-NP) course.
Advanced word processing concepts and applications using a computer software program.

CAOS 91BN  Word Processing II (Word 2010)  2 Units
Prerequisite: Computer Applications and Office Systems 91AN.
Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263.
Four hours lecture-laboratory (48 hours total per quarter).
Pass-No Pass (P-NP) course.
Advanced word processing concepts and applications using a computer software program.

CAOS 93AL  Spreadsheet I (Excel XP/2002)  2 Units
Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263; Computer Applications and Office Systems 90GA.
Four hours lecture-laboratory (48 hours total per quarter).
Pass-No Pass (P-NP) course.
A general introduction to basic data manipulation skills and techniques used with spreadsheets: editing, computation, database management, graphing.

CAOS 93AM  Spreadsheet I (Excel 2007)  2 Units
Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263; Computer Applications and Office Systems 90GA.
Four hours lecture-laboratory (48 hours total per quarter).
Pass-No Pass (P-NP) course.
A general introduction to basic data manipulation skills and techniques used with spreadsheets: editing, computation, database management, graphing.

CAOS 93AN  Spreadsheet I (Excel 2010)  2 Units
Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263; Computer Applications and Office Systems 90GA.
Four hours lecture-laboratory (48 hours total per quarter).
Pass-No Pass (P-NP) course.
A general introduction to basic data manipulation skills and techniques used with spreadsheets: editing, computation, database management, graphing.

CAOS 93BL  Spreadsheet II (Excel XP/2002)  2 Units
Prerequisite: Computer Applications and Office Systems 93AL.
Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263.
Four hours lecture-laboratory (48 hours total per quarter).
Pass-No Pass (P-NP) course.
Advanced spreadsheet design using unique spreadsheet features: graphing, information retrieval, table searches, financial business calculations for decision making.

CAOS 93BM  Spreadsheet II (Excel 2007)  2 Units
Prerequisite: Computer Applications and Office Systems 93AM.
Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263.
Four hours lecture-laboratory (48 hours total per quarter).
Pass-No Pass (P-NP) course.
Advanced spreadsheet design using unique spreadsheet features: graphing, information retrieval, table searches, financial business calculations for decision making.

CAOS 93BN  Spreadsheet II (Excel 2010)  2 Units
Prerequisite: Computer Applications and Office Systems 93AN.
Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263.
Four hours lecture-laboratory (48 hours total per quarter).
Pass-No Pass (P-NP) course.
Advanced spreadsheet design using unique spreadsheet features: graphing, information retrieval, table searches, financial business calculations for decision making.

CAOS 94  Introduction to the Internet and World Wide Web  1 Unit
Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263.
(Also listed as Computer Information Systems 94. Students may enroll in either department, but not both, for credit.)
Two hours lecture-laboratory (48 hours total per quarter).
Pass-No Pass (P-NP) course.
Introduction to using the Internet. Topics include an overview of the World Wide Web, e-mail, news groups, bulletin boards, WWW browsers, basic Web page elements and exploration of virtual communities.

CAOS 98U  Internship, Business/Computer Systems  1 Unit
Division
CAOS 98V  2 Units
CAOS 98W  3 Units
CAOS 98X  4 Units
CAOS 98Y  5 Units
CAOS 98Z  6 Units
Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.
(Also listed as Accounting 98U-Z, Business 98U-Z, and Computer Information Systems 98U-Z. Students may enroll in only one department for credit.)
Four hours laboratory per unit of supervised internship in an authorized office or agency (48 hours total for each unit of credit per quarter).
(Any combination of Accounting 98U-Z, Business 98U-Z, Computer Applications and Office Systems 98U-Z, and Computer Information Systems 98U-Z may be taken up to six times, not to exceed 18 units, for credit. During each internship, students will be placed at different employer locations, different working environments, and/or given different assignments within the same company or department--thus providing the students with various opportunities to learn different skills. Students may repeat the same internship location and working environment if the student, employer, and instructor believe it would provide the student with increased work experience.)
Off-campus supervised experiential education/internship for Business/Computer Systems Division students in research or business office environments related to student's major. Practical application of knowledge, skills and abilities acquired in student's major. Opportunity for additional hands-on training. Exposure to varied corporate, state and federal protocols, methodologies and practices in a professional environment.

CAOS 102L  Microsoft Windows I (Windows XP)  1 Unit
Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263; Computer Applications and Office Systems 90GA.
Four hours lecture-laboratory (24 hours total per quarter).
Pass-No Pass (P-NP) course.
Use of an operating environment which extends the Microsoft Disk Operating System (MS DOS) and the use of the Microsoft Windows Desktop Applications programs.

CAOS 102M  Microsoft Windows I (Windows Vista)  1 Unit
Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263; Computer Applications and Office Systems 90GA.
Two hours lecture-laboratory (24 hours total per quarter).
Pass-No Pass (P-NP) course.
Use of an operating environment which extends the Microsoft Disk Operating System (MS DOS) and the use of the Microsoft Windows Desktop Applications programs.

CAOS 102N  Microsoft Windows I (Windows 7)  1 Unit
Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263; Computer Applications and Office Systems 90GA.
Two hours lecture-laboratory (24 hours total per quarter).
Pass-No Pass (P-NP) course.
Use of an operating environment which extends the Microsoft Disk Operating System (MS DOS) and the use of the Microsoft Windows Desktop Applications programs.

CAOS 104I  Ten-Key on the Microcomputer  1/2 Unit
Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263; Computer Applications and Office Systems 90GA or 173.
One hour lecture-laboratory (12 hours total per quarter).
Pass-No Pass (P-NP) course.
Development of ten-key numeric data entry skills. Emphasis on developing speed and accuracy in entering numeric data in an office environment.

All courses are for unit credit and apply to a De Anza associate degree unless otherwise noted.
CAOS 104K Introduction to Proofreading Skills 1 Unit
Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263; Computer Applications and Office Systems 70AA.
Two hours lecture-laboratory (24 hours total per quarter).
Pass-No Pass (P-NP) course.
Entry-level concepts and methods of proofreading. Emphasis on proofreading short business documents, multi-page reports, tables, and graphics.

CAOS 104O Introduction to Filing 1 Unit
Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263; Computer Applications and Office Systems 70AA or 173 and 102K, 102L, 102M or 102T.
Two hours lecture-laboratory (24 hours total per quarter).
Pass-No Pass (P-NP) course.
Enter-level concepts and terminology of filing rules for an office environment.

CAOS 105 Introduction to HTML 1 Unit
Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263.
Two hours lecture-laboratory (24 hours total per quarter).
Pass-No Pass (P-NP) course.
An introduction to hypertext markup language (HTML) covering creation of hyperlinks, inserting images, and producing basic tables and forms.

CAOS 106 Adobe Acrobat 1 Unit
Advisory: Computer Applications and Office Systems 90GA.
Two hours lecture-laboratory (24 hours total per quarter).
Pass-No Pass (P-NP) course.
An introduction to hypertext markup language (HTML) covering creation, modification and review of PDF documents, and interactive PDF forms using Adobe Acrobat.

CAOS 107G Business Office Math 2 Units
Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263.
Four hours lecture-laboratory (48 hours total per quarter).
Pass-No Pass (P-NP) course.
Review of basic math skills with emphasis on business applications and critical thinking problems. Instruction and application exercises involving math tasks needed for employment.

CAOS 108 Personal Computer Security Basics 4 Units
Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263; Computer Applications and Office Systems 90GA or equivalent.
(Also listed as Computer Information Systems 108. Students may enroll in either department, but not both, for credit.)
Four hours lecture (48 hours total per quarter).
Beginner's computer security course for small office or home users. Learn to stop hackers, worms, viruses, spyware, Web bugs and identity theft. Learn vulnerabilities found in Web browsers, e-mail and operating systems. Protect against online purchase dangers, install firewalls, manage cookies, restrict ports, analyze log files, evaluate wireless networks and examine encryption.

CAOS 109 Data and Filing Management 2 Units
(Formerly Computer Applications and Office Systems 88.)
Prerequisite: Computer Applications and Office Systems 70AA.
Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263.
Four hours lecture-laboratory (48 hours total per quarter).
Pass-No Pass (P-NP) course.
Management of business records and of indexing and filing procedures; theory and practice of alphabetic, numeric, geographic and subject systems. Utilize manual and computer applications to apply correct data management procedures.

CAOS 110L Database I (Access XP/2002) 2 Units
Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263; Computer Applications and Office Systems 90GA or 102G-P
Four hours lecture-laboratory (48 hours total per quarter).
Pass-No Pass (P-NP) course.
Use of database software to create, search, modify and arrange information.

CAOS 110M Database I (Access 2007) 2 Units
Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263; Computer Applications and Office Systems 90GA or 102G-P
Four hours lecture-laboratory (48 hours total per quarter).
Pass-No Pass (P-NP) course.
Use of database software to create, search, modify and arrange information.

CAOS 110N Database I (Access 2010) 2 Units
Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263; Computer Applications and Office Systems 90GA or 102G-P
Four hours lecture-laboratory (48 hours total per quarter).
Pass-No Pass (P-NP) course.
Use of database software to create, search, modify and arrange information.

CAOS 111L Database II (Access XP/2002) 2 Units
Prerequisite: Computer Applications and Office Systems 110L.
Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263.
Four hours lecture-laboratory (48 hours total per quarter).
Pass-No Pass (P-NP) course.
Use database commands to build and modify data files and forms, refine queries and generate customized reports. Integrate database files with other applications.

CAOS 111M Database II (Access 2007) 2 Units
Prerequisite: Computer Applications and Office Systems 110M.
Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263.
Four hours lecture-laboratory (48 hours total per quarter).
Pass-No Pass (P-NP) course.
Use database commands to build and modify data files and forms, refine queries and generate customized reports. Integrate database files with other applications.

CAOS 111N Database II (Access 2010) 2 Units
Prerequisite: Computer Applications and Office Systems 110N.
Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263.
Four hours lecture-laboratory (48 hours total per quarter).
Pass-No Pass (P-NP) course.
Use database commands to build and modify data files and forms, refine queries and generate customized reports. Integrate database files with other applications.

CAOS 112A Digital Imaging Software (Photoshop) 4 Units
(Students may receive credit for either Computer Applications and Office Systems 112A (or 112I and 112Q); Arts 112A (or 112I and 112Q); or CAD and Digital Imaging 112A (or 112I and 112Q).)
Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263; Computer Applications and Office Systems 90GA.
(Also listed as Arts 112A and CAD and Digital Imaging 112A. Students may enroll in only one department for credit.)
Eight hours lecture-laboratory (96 hours total per quarter).
Pass-No Pass (P-NP) course.
Basic and intermediate principles using digital imaging software to produce graphics for websites. Introduction to digital imaging terminology and software. This course is for the content person to produce Web pages using digital images.

CAOS 112I Digital Imaging Software I (Photoshop) 2 Units
(Students may receive credit for either Computer Applications and Office Systems 112A (or 112I and 112Q); Arts 112A (or 112I and 112Q); or CAD and Digital Imaging 112A (or 112I and 112Q).)
Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263; Computer Applications and Office Systems 90GA.
(Also listed as Arts 112I and CAD and Digital Imaging 112I. Students may enroll in only one department for credit.)
Four hours lecture-laboratory (48 hours total per quarter).
Pass-No Pass (P-NP) course.
Basic principles of using digital imaging software to produce graphics for websites. Introduction to digital imaging terminology and software. This course is for the content person to produce Web pages using digital images.

CAOS 112Q Digital Imaging Software II (Photoshop) 2 Units
(Students may receive credit for either Computer Applications and Office Systems 112A (or 112I and 112Q); Arts 112A (or 112I and 112Q); or CAD and Digital Imaging 112A (or 112I and 112Q).)
Prerequisite: Arts 112I or CAD and Digital Imaging 112I.
Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263; Computer Applications and Office Systems 90GA.
(Also listed as Arts 112Q and CAD and Digital Imaging 112Q. Students may enroll in only one department for credit.)
Four hours lecture-laboratory (48 hours total per quarter).
Pass-No Pass (P-NP) course.
Basic and intermediate principles of using digital imaging software to produce graphics for websites. Introduction to digital imaging terminology and software. This course is for the content person to produce Web pages using digital images.
CAOS 113A  Web Authoring Software (Dreamweaver)  4 Units
Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263; Computer Applications and Office Systems 90GA and 102G-P.
(Also listed as Arts 113A. Students may enroll in either department, but not both, for credit.)
Eight hours lecture-laboratory (96 hours total per quarter).
Pass-No Pass (P-NP) course.
Basic and intermediate principles of building Web pages/sites using Web authoring software. Introduction to Web authoring terminology and software. This course is for the content person to develop and maintain an effective website.

CAOS 114A  Web Graphics/Animation Software (Flash)  3 Units
Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263; Computer Applications and Office Systems 112A (or 112i and 112Q); or Arts 112A (or 112i and 112Q); or CAD and Digital Imaging 112A (or 112i and 112Q).
(Also listed as Arts 114A and CAD and Digital Imaging 114A. Students may enroll in only one department for credit.)
Six hours lecture-laboratory (72 hours total per quarter).
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 website.

CAOS 115A  E-Commerce Software (Dreamweaver UltraDev - CS3)  4 Units
Prerequisite: Computer Applications and Office Systems 113A or Arts 113A; and Computer Applications and Office Systems 110L or 110M (or another database software).
Eight hours lecture-laboratory (96 hours total per quarter).
Pass-No Pass (P-NP) course.
Basic and intermediate principles of using e-commerce software to create effective websites. Introduction to e-commerce terminology and software. This course is for the content person to produce effective, database-driven websites to start an on-line business.

CAOS 116I  Web Development Graphics Software I  2 Units (Illustrator)
Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263.
(Also listed as Arts 116I. Students may enroll in either department, but not both, for credit.)
Four hours lecture-laboratory (48 hours total per quarter).
Pass-No Pass (P-NP) course.
Basic 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.

CAOS 118A  Advanced Web Graphics/Animation Software (Flash)  3 Units
Prerequisite: Computer Applications and Office Systems 114A, or Arts 114A, or CAD and Digital Imaging 114A.
Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263; Computer Applications and Office Systems 90GA.
(Also listed as Arts 118A and CAD and Digital Imaging 118A. Students may enroll in only one department for credit.)
Six hours lecture-laboratory (72 hours total per quarter).
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.

CAOS 130L  Introduction to Business Graphics  2 Units (PowerPoint XP/2002)
Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263; Computer Applications and Office Systems 102G-P.
Four hours lecture-laboratory (48 hours total per quarter).
Pass-No Pass (P-NP) course.
Introduction to presentation software using Microsoft PowerPoint. Course provides hands-on experience to produce text, graphic, chart and graph images for professional presentations.

CAOS 130M  Introduction to Business Graphics (PowerPoint 2007)  2 Units
Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263; Computer Applications and Office Systems 102G-P.
Four hours lecture-laboratory (48 hours total per quarter).
Pass-No Pass (P-NP) course.
Introduction to presentation software using Microsoft PowerPoint. Course provides hands-on experience to produce text, graphic, chart and graph images for professional presentations.

CAOS 130N  Introduction to Business Graphics (PowerPoint 2010)  2 Units
Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263; Computer Applications and Office Systems 102G-P.
Four hours lecture-laboratory (48 hours total per quarter).
Pass-No Pass (P-NP) course.
Introduction to presentation software using Microsoft PowerPoint. Course provides hands-on experience to produce text, graphic, chart and graph images for professional presentations.

CAOS 135  Foreclosure Technology Tools  1 Unit
Requisite/Advisory: None.
(Also listed as Real Estate 135. Students may enroll in either department, but not both, for credit.)
One hour lecture (12 hours total per quarter).
Learn the basic principles to purchase foreclosed and short sale real estate properties using essential technology tools. Course explores three stages of foreclosures including pre-foreclosure, auction, and bank owned (REO) properties. Explore essential tips that home buyers, investors and real estate agents must consider before purchasing distressed properties.
(DRE approved for 6 hours CE Consumer Protection credit. A 70% or better required on the final exam.)

CAOS 150A  Desktop Hardware (A+ Certification Part I)  3 Units
Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263; Computer Applications and Office Systems 90GA.
Three hours lecture (36 hours total per quarter).
Pass-No Pass (P-NP) course.
Provides service technicians and network administrators the necessary skills to identify, install, configure, and upgrade desktop computers and peripheral hardware. Course also helps students prepare to pass the comptIA A+ Technician Certification Exams.

CAOS 161  Computer Forensics  4 Units
Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263; Computer Applications and Office Systems 150A or equivalent; Computer Applications and Office Systems 102L or equivalent.
(Also listed as Administration of Justice 161 and Computer Information Systems 161. Students may enroll in only one department for credit.)
Three hours lecture, two hours lecture-laboratory (60 hours total per quarter).
Pass-No Pass (P-NP) course.
Introduction to computer crime investigation processes. Guides students to becoming computer forensics investigators who can acquire and analyze data from a computer to be used as evidence. Topics include computer forensics tools, data recovery and retrieval, information gathering techniques, computer data preservation techniques, and computer crime investigation techniques. System Administrators, IT Managers, and Law Enforcement Officers, would benefit from taking this course as well as individuals wanting to become Computer Forensics Consultants.

CAOS 170F  Windows 7 Administration  4 1/2 Units
Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263; Computer Applications and Office Systems 102M.
(Also listed as Computer Informations Systems 170F. Students may enroll in either department, but not both, for credit.)
Four hours lecture, one and one-half hours laboratory (66 hours total per quarter).
Provides knowledge and skills to setup, configure, use, and support Windows 7 operating system. Course covers Windows 7 features including installing, upgrading, configuring and troubleshooting. Learn how to configure Windows security, network connectivity and subsystems. Additional topics include configuring/troubleshooting mobile computing and learning how to use Windows 7’s built-in applications.

CAOS 173  Keyboarding Skill Development  1 Unit
Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263; Computer Applications and Office Systems 70AA.
Two hours lecture-laboratory (24 hours total per quarter).
(May be taken up to three times for credit.)
Pass-No Pass (P-NP) course.
Speed and accuracy development in keyboarding skills.

All courses are for unit credit and apply to a De Anza associate degree unless otherwise noted.
CAOS 176 Telephone Communications 1 Unit
Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263.
Two hours lecture-laboratory (24 hours total per quarter).
Pass-No Pass (P-NP) course.
Techniques for handling incoming and outgoing phone calls, listening skills and customer relations.

CAOS 180G Job Finding Techniques 1 Unit
Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263; Computer Applications and Office Systems 70AA.
Two hours lecture-laboratory (24 hours total per quarter).
Pass-No Pass (P-NP) course.
Techniques of finding a job including resume, cover letter, and reference letter generation. Course includes interview, lead generation and networking techniques.

CAOS 180J Spelling Skills 1 Unit
Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263.
Two hours lecture-laboratory (24 hours total per quarter).
Pass-No Pass (P-NP) course.
Techniques used in spelling.

Computer Information Systems

CIS 2 Computers and the Internet in Society 4 Units
(See general education pages for the requirement this course meets.)
Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.
Four hours lecture (48 hours total per quarter).
A critical examination of the capabilities and uses of the Internet, computers and cellular communications, and how they are changing business, law, politics, health, education, entertainment, and society.

CIS 3 Business Information Systems 4 1/2 Units
Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.
Four hours lecture, one and one-half hours laboratory (66 hours total per quarter).
Introduction to management information systems, systems design and development, data communications, data management, office automation, computer hardware and software concepts. Use of common software packages for business applications including word processing, spreadsheets, database, and Internet web tools.

CIS 14A Visual Basic .NET Programming I 4 1/2 Units
Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.
Four hours lecture, one and one-half hours laboratory (66 hours total per quarter).

CIS 14B Visual Basic .NET Programming II 4 1/2 Units
Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Computer Information Systems 14A or equivalent.
Four hours lecture, one and one-half hours laboratory (66 hours total per quarter).
Develop professional looking and deployable visual basic applications using advanced controls, user-created classes, incorporating databases with ADO.NET 3.5, calling APIs, and creating Web applications.

CIS 15AG Introduction to Computer Programming Using C 4 1/2 Units
(Students may receive credit for either Computer Information Systems 15AG and 15BG, or Computer Information Systems 26A.)
Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 114 or equivalent; Computer Information Systems 50; Computer Applications and Office Systems 70AA.
Four hours lecture, one and one-half hours laboratory (66 hours total per quarter).
Problem solving, algorithms and structured program design. Programming, testing and debugging of well-structured programs in C. Introduction to data types, expressions, control structures, functions, sequential files, and one-dimensional arrays.

CIS 15BG Intermediate Problem Solving in C 4 1/2 Units
(Students may receive credit for either Computer Information Systems 15AG and 15BG, or Computer Information Systems 26A.)
Prerequisite: Computer Information Systems 15AG.
Four hours lecture, one and one-half hours laboratory (66 hours total per quarter).
A systematic approach to the design, construction and management of computer programs, emphasis design, programming style, documentation, testing and debugging techniques. Strings, multidimensional arrays and structures. Pointers: their use in arrays, parameters and dynamic allocation. Introduction to linked lists.

CIS 15C Data Structures 4 1/2 Units
Prerequisite: Computer Information Systems 15BG or 26A.
Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 212 or equivalent.
Four hours lecture, one and one-half hours laboratory (66 hours total per quarter).
Stacks, queues, linked lists, trees, heaps, and graphs; internal and external sorting; use of recursion; hashing; structured programming; and abstract data type concepts; team project.

CIS 18A Introduction to UNIX/LINUX 4 1/2 Units
Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Computer Information Systems 10.
Four hours lecture, one and one-half hours laboratory (66 hours total per quarter).
Introduction to the features of the UNIX/LINUX operating system including text editing, file file manipulation, electronic mail, Internet utilities, directory structures, input/output handling, and shell features.

CIS 18B Advanced UNIX/LINUX 4 1/2 Units
Prerequisite: Computer Information Systems 14A or 15AG; and Computer Information Systems 18A.
Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.
Four hours lecture, one and one-half hours laboratory (66 hours total per quarter).
Coverage of regular expressions, grep, sed, and awk utilities.

CIS 18C Shell Programming 4 1/2 Units
Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; any introductory programming course and Computer Information Systems 18B.
Four hours lecture, one and one-half hours laboratory (66 hours total per quarter).
Programming in bash shell, Bourne shell, Korn shell, and C shell.

CIS 21JA Introduction to 8086/IA 32 Processor Assembly Language 4 1/2 Units
Prerequisite: Computer Information Systems 15BG or 26A.
Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 210 or equivalent.
Four hours lecture, one and one-half hours laboratory (66 hours total per quarter).
Introduction to the syntax and semantics of 8086 and IA32 assembly language, standard instruction set, selected pseudo and macro instructions, arrays, 8086/286/386/486/Pentium features.

CIS 21JB Advanced Programming: Series 86 and IA32/Pentium Assembly Language 4 1/2 Units
Prerequisite: Computer Information Systems 21JA.
Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 210 or equivalent.
Four hours lecture, one and one-half hours laboratory (66 hours total per quarter).
Coverage of theory and application of advanced programming techniques, with emphasis on combining multiple modules in a single program, inter-program connection, interrupt level programming and macro writing, recursive and reentrant techniques.

CIS 26A C as a Second Programming Language 4 1/2 Units
(This course is intended for students who are competent in another programming language. Students may receive credit for either Computer Information Systems 15AG and 15BG, or Computer Information Systems 26A, but not both.)
Prerequisite: An Introductory Programming Language course such as Computer Information Systems 14A.
Four hours lecture, one and one-half hours laboratory (66 hours total per quarter).
An introduction to the C programming language and its applications. Topics covered include: basic input/output, structured program design and implementation, basic control structures and keywords, arrays and pointers, character and string manipulation, arithmetic expressions, and functions and program modularization.
CIS 26B  Advanced C Programming  4 1/2 Units
Prerequisite: Computer Information Systems 15BG or 26A.
Advisory: English Writing 200 and Reading 200 (or Language Arts 200); or English as a Second Language 261, 262 and 263; Mathematics 212 or equivalent.
Four hours lecture, one and one-half hours laboratory (66 hours total per quarter).
Applications of advanced features of C and the C-library functions including: binary and random-access input/output, dynamic data structures, bit manipulation, string parsing and string-to-numeric conversion, event and error processing, function pointers, recursion, and variable-length argument list functions.

CIS 27  Programming in C++ for C Programmers  4 1/2 Units
Prerequisite: Computer Information Systems 15BG or 26A.
Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.
Four hours lecture, one and one-half hours laboratory (66 hours total per quarter).
A comprehensive introduction to the C++ programming language and its applications.

CIS 28  Object-Oriented Analysis and Design  4 1/2 Units
Prerequisite: Computer Information Systems 27 or 35A or equivalent experience.
Four hours lecture, one and one-half hours laboratory (66 hours total per quarter).
Defines and illustrates the object-oriented paradigm for analyzing, designing and implementing object-oriented computer applications. Trade-offs between various object-oriented techniques will be illustrated with a series of real-world applications to allow the student to optimize his/her solutions for robustness and reuse.

CIS 29  Advanced C++ Programming  4 1/2 Units
(Formerly Computer Information Systems 52G.)
Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Computer Information Systems 27.
Four hours lecture, one and one-half hours laboratory (66 hours total per quarter).
Advanced topics in C++ including: namespace, string and string-stream classes, cast operators, multiple inheritance, exception handling, compilation concepts, libraries, templates, the Standard Template Library and programming style.

CIS 30A  Introduction to C# Programming  4 1/2 Units
(Formerly Computer Information Systems 65A.)
Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.
Four hours lecture, one and one-half hours laboratory (66 hours total per quarter).
Introduction to C# programming, .Net Environment, computing context, primitive types, flow of control constructs, operators, text I/O, objects and classes, interfaces, packages, GUI, exceptions, and threads.

CIS 30B  Advanced C# Programming  4 1/2 Units
(Formerly Computer Information Systems 65B.)
Prerequisite: Computer Information Systems 30A.
Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.
Four hours lecture, one and one-half hours laboratory (66 hours total per quarter).
Emphasis on foundation technologies in C# that enable you to write server side programs in C#. Concepts include inner classes, collections, exceptions, file I/O, reflection, cloning, and multi-threading.

CIS 31  Operating System Concepts  5 Units
Advisory: Computer Information Systems 15BG and 21JA.
Five lecture hours (60 hours total per quarter).
Concepts and use of operating systems: multiprogramming and multiprocessing systems; processes and threads, mutual exclusion, indefinite postponement, deadlocks; scheduling considerations and security management.

CIS 33A  Programming in PERL  4 1/2 Units
Prerequisite: Computer Information Systems 18A; and Computer Information
Systems 15BG or 26A.
Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263.
Four hours lecture, one and one-half hours laboratory (66 hours total per quarter).
A complete coverage of the core PERL language. Topics covered will include: basic loops and control structures, the elemental data types and operators, subroutines and variable scooping, regular expressions and text parsing, manipulation of files and directories, advanced list processing with grep and map, references, built-in functions and core modules, and advanced input/output including random-access files and formatting.

CIS 33B  Advanced PERL Programming  4 1/2 Units
Prerequisite: Computer Information Systems 15BG; or Computer Information Systems 26A and 33A.
Four hours lecture, one and one-half hours laboratory (66 hours total per quarter).
Exploration of advanced topics from the core PERL distribution and essential non-core modules. Topics include reference-based data structures, object-oriented programming, connecting to SQL-based relational databases, non-relational database and file structures, process creation and management, and TCP/IP Client/Server programming.

CIS 35A  Introduction to Java Programming  4 1/2 Units
Prerequisite: Computer Information Systems 15BG or 26A.
Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.
Four hours lecture, one and one-half hours laboratory (66 hours total per quarter).
Introduction to JAVA programming, computing context, primitive types, flow of control constructs, operators, text I/O, objects and classes, interfaces, packages, GUI and exceptions.

CIS 35B  Advanced Java Programming  4 1/2 Units
Prerequisite: Computer Information Systems 35A.
Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.
Four hours lecture, one and one-half hours laboratory (66 hours total per quarter).
Emphasis on foundation technologies in Java that enable you to write server side programs in Java. Concepts include inner classes, collections, exceptions, file I/O, reflection, cloning, swing, multi-threading and JavaBeans.

CIS 50  Introduction to Computers, Data Processing, and Applications  3 Units
Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.
Three lecture hours (36 hours total per quarter).
Computer information systems (IS) basic terms and concepts. Important IS trends. Using systems development to build information systems. Survey of functions and components of an information system including applications software, systems software, telecommunications, networks, the Internet and Web. Social and organization issues.

CIS 53  Distributed Processing Using Java  4 1/2 Units
Prerequisite: Computer Information Systems 35B.
Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.
Four lecture hours, and one and one-half hours laboratory (66 hours total per quarter).
Distributed computing using Java features including: JDBC, Java Servlets, Java Server Pages, RMI, Enterprise JavaBeans, Java Transaction Services, XML and Java, Introduction to Web Services.

CIS 57  Web Site Administration  4 1/2 Units
Prerequisite: Computer Information Systems 66 and 89A.
Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263.
Four hours lecture, one and one-half hours laboratory (66 hours total per quarter).
Introduction to establishing, configuring, managing and controlling access to Internet servers.

CIS 61A  Introduction to Computer Programming Using Java  4 1/2 Units
(Students may receive credit for either Computer Information Systems 61A and 61B, or Computer Information Systems 35A.)
Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 114 or equivalent.
Four lecture hours, one and one-half hours laboratory (66 hours total per quarter).
Problem solving, algorithms, and program design. Programming, testing and debugging of programs in Java. Introduction to expressions, control structures, methods, classes, strings, and arrays.

CIS 61B  Intermediate Problem Solving in Java  4 1/2 Units
(Students may receive credit for either Computer Information Systems 61A and 61B, or Computer Information Systems 35A.)
Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Computer Information Systems 61A.
Four hours lecture, one and one-half hours laboratory (66 hours total per quarter).
A systematic approach to the design, construction and management of computer programs, emphasizing design, programming style, documentation, testing and debugging techniques.
CIS 63 Systems Design 4 1/2 Units
Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.
Four hours lecture, one and one-half hours laboratory (66 hours total per quarter).
Current tools of structured systems analysis and design; data flow diagrams, structure charts, HIPO charts, VTOCs, data structure/dictionaries, decision trees and tables, pseudo code.

CIS 64A Data Base Management Systems 4 1/2 Units
Prerequisite: Computer Information Systems 15BG.
Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.
Four hours lecture, one and one-half hours laboratory (66 hours total per quarter).
Rudiments of data base design, implementation and use. Basic understanding of various data modeling techniques. Overview and comparison of data base management systems. Emphasis on relational data bases; introduction to SQL.

CIS 64B Introduction to SQL 4 1/2 Units
Prerequisite: Computer Information Systems 64A.
Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.
Four hours lecture, one and one-half hours laboratory (66 hours total per quarter).
Introduction to Oracle SQL (Structured Query Language), DML (Data Manipulation Language) processing techniques, DDL (Data Definition Language) techniques, selecting and sorting data, joins, SQL functions, Oracle objects, Oracle data processing concepts to maintain large database systems.

CIS 64C Introduction to PL/SQL 4 Units
Prerequisite: Computer Information Systems 64C.
Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.
Three hours lecture (36 hours total per quarter).
Emphasis on importance of Performance Tuning, techniques for tuning several Oracle components, optimizing database for high volume transactions and Data Warehouses.

CIS 65 Introduction to Data Communication and Networking 5 Units
Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263; Computer Information Systems 3 or 50.
Five hours lecture (60 hours total per quarter).
Concepts of communication, data communications and networks. Overview of connectivity options, common protocols, local and wide area networks.

CIS 67A Local Area Networks 4 Units
Advisory: Computer Information Systems 66.
Four hours lecture (48 hours total per quarter).
Fundamental concepts of Local Area Network architecture and protocols. Emphasis on basic concepts of local area networks and implement Local Area Networks. Emphasis on the evolution of Fast Traditional Ethernet, Fast Ethernet, Gigabit Ethernet, Ten-Gigabit Ethernet, ATM, and wireless LANs.

CIS 67B Introduction to Wide Area Networking 4 Units
Prerequisite: Computer Information Systems 67A.
Four hours lecture (48 hours total per quarter).

CIS 73 UNIX/LINUX Systems Programming 5 Units
Prerequisite: Computer Information Systems 18A and 26B.
Four hours lecture, three hours laboratory (84 hours total per quarter).
Coverage of systems programming in the UNIX/LINUX/Posix environments, with emphasis on low-level UNIX/LINUX/Posix system calls from C programs and Shell scripts. Discussion of differences in major UNIX/LINUX/Posix environments.

CIS 74 Computer Software Quality Assurance 4 1/2 Units
Advisory: Computer Information Systems 50.
Four hours lecture, one and one-half hours laboratory (66 hours total per quarter).
Analysis of types of software; software development life cycle; top down design and structured programming; modularization; standards and practices; software configuration management; software testing; documentation; software error types, causes; software quality assurance plans and procedures; software discrepancy reports, analysis; software visibility for managers.

CIS 75A Internet Concepts and TCP/IP Protocols 5 Units
Prerequisite: Computer Information Systems 66.
Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Computer Information Systems 67B and 26A, or Computer Information Systems 15AG.
Five hours lecture (60 hours total per quarter).
The architecture and underlying protocols of the Internet. The Internet will be examined as a layered product. Layers discussed will include mid-level packet delivery and address computation and high-level client/server applications using the TCP/IP Protocol Suite.

CIS 75B Internet Programming With TCP/IP 4 1/2 Units
Prerequisite: Computer Information Systems 26B and 75A.
Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.
Four hours lecture, one and one-half hours laboratory (66 hours total per quarter).
Writing client/server applications using the TCP/IP protocol suite. All server classes - "well known", iterative, concurrent, and polling - will be explored and used. Typical Internet programming problems will be addressed including resource availability, machine addressing, and differences in data representation between communicating computers.

CIS 75C Enterprise Security Threats 4 1/2 Units
Prerequisite: Computer Information Systems 75A or equivalent experience.
Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.
Four hours lecture, one and one-half hours laboratory (66 hours total per quarter).
Learn how to apply Enterprise Security Concepts to monitor security threats, outages and analyze such results. Learn to predict hacker’s mindset and respond to hacker attack. Raise awareness in your workplace about Security policy and procedures. System Administrators, IT Managers and Analysts would benefit from this course as well as technologists wanting to broaden their impact.

CIS 75D Enterprise Security Policy Management 3 Units
Prerequisite: Computer Information Systems 75A or equivalent experience.
Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.
Two hours lecture, three hours laboratory (60 hours total per quarter).
Learn how to secure your enterprise network by creating a security policy and create procedures to maintain security policy. Learn to perform risk analysis and assessment on enterprise security. System Administrators, IT Managers and Analysts would benefit from this course as well as technologists wanting to broaden their impact.

CIS 75E Enterprise Emergency Response Planning 2 Units
Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.
Two hours lecture (24 hours total per quarter).
Learn how to plan for emergency response, recover from a disaster and how to mitigate risks. System Administrators, IT managers and Analysts would benefit from this course as well as technologists wanting to broaden their impact.

CIS 76 Introduction to Network Security 4 Units
Prerequisite: Computer Information Systems 75A.
Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 212 or equivalent.
Four hours lecture (48 hours total per quarter).
Network security using the standard protocols and algorithms. All three goals of security including confidentiality, integrity, and availability will be discussed. Attacks on security including active and passive are discussed and elaborated on. Two major techniques of security, cryptography and steganography, are described with emphasis on cryptography. The emphasis is on mechanisms and services provided by the network security.

CIS 77 Special Projects in Computer Information Systems 1 Unit

CIS 77X 2 Units
CIS 77Y 3 Units
(Formerly Computer Information Systems 96, 96X and 96Y respectively.)
Prerequisite: Approved Special Projects Contract and appropriate technical background to support the completion of project objectives.
Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.
Three hours laboratory for each unit of credit (36 hours total for each unit of credit per quarter). (Hours to be individually arranged.)
(Any combination of Computer Information Systems 77, 77X and 77Y may be taken up to six times, not to exceed 18 units, as long as the projects are different each time.)
Design, implement, and document a special computer programming project.
CIS 79 Managing Technology Projects 4 1/2 Units
Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.
Four hours lecture, one and one-half hours laboratory (66 hours total per quarter).
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.

CIS 80A Process Management 3 Units
Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.
Three hours lecture (36 hours total per quarter).
Learn the basics of process mapping in examining work flow and relationships to improve the efficiency of an organization, improve communication and understanding, and find ways to optimize a process.

CIS 86 Computer Accounting Systems 5 Units
Prerequisite: Accounting 1A.
Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.
(Also listed as Accounting 86. Students may enroll in either department, but not both, for credit.)
Five hours lecture (60 hours total per quarter).
Fundamentals of computerized accounting using integrated general ledger software packages and electronic spreadsheet software. Conversion of a manual system to a computer system.

CIS 89A Web Page Development 3 Units
Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Computer Information Systems 18A.
Two hours lecture, three hours laboratory (60 hours total per quarter).
Fundamentals of Web page design and creation: designing, encoding, and maintaining pages on the World Wide Web using HTML/XHTML.

CIS 89C Client-Side Programming with JavaScript 4 1/2 Units
Advisory: Computer Information Systems 89A, and Computer Information Systems 14A or 15G.
Four hours lecture, one and one-half hours laboratory (66 hours total per quarter).
Fundamentals of client-side programming for Web pages requiring data collection or other user interaction. Students will create Web pages that execute on the client (personal system) using JavaScript.

CIS 94 Introduction to the Internet and World Wide Web 1 Unit
Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263.
(Also listed as Computer Applications and Office Systems 94. Students may enroll in either department, but not both, for credit.)
Two hours lecture-laboratory (24 hours total per quarter).
Pass-No Pass (P-NP) course.
Introduction to using the Internet. Topics include an overview of the World Wide Web, e-mail, news groups, bulletin boards, World Wide Web browsers, basic Web page elements and exploration of virtual communities.

CIS 95A Project Management - A Practicum 5 Units
Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.
Five hours lecture (60 hours total per quarter).
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.

CIS 95B Project Planning and Control - A Practicum 4 Units
Prerequisite: Computer Information Systems 95A or equivalent experience.
Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.
Four hours lecture (48 hours total per quarter).
Create a project scope statement that will act as a basis for creating a project plan. Build a project plan that integrates time, resources and communication with cost and quality of work. Plan controls to proactively mitigate risks.

CIS 95C Risk Assessment and Mitigation - A Practicum 4 Units
Prerequisite: Computer Information Systems 95B or equivalent experience.
Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.
Four hours lecture (48 hours total per quarter).
Focus on responding to uncertain events or conditions for a positive or negative effect on project objectives. Implement techniques for planning for risks and learn to change project plans to reduce the probability and/or impact of the risk.

CIS 95D Managing Outsourcing - A Practicum 3 Units
Prerequisite: Computer Information Systems 95C or equivalent experience.
Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.
Three hours lecture (36 hours total per quarter).
Learn to acquire goods and services from an outer organization using procurement and solicitation processes. Perform contract administration till completion and settlement of contract.

CIS 95E CAPM and PMP Exam Preparation 4 Units
Prerequisite: Computer Information Systems 95A or equivalent experience.
Four hours lecture (48 hours total per quarter).
Prepares the student for attempting the Project Management Professional (PMP) or Certified Associate in Project Management (CAPM) examination provided by Project Management Institute (PMI). Topics include management of integration, scope, time, cost, quality, human resources, communications, risk and procurement.

CIS 98U Internship, Business/Computer Systems Division 1 Unit
Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.
(Also listed as Accounting 98U-Z, Business 98U-Z, and Computer Applications and Office Systems 98U-Z. Students may enroll in only one department for credit.)
Four hours laboratory per unit of supervised internship in an authorized office or agency (48 hours total for each unit of credit per quarter).
(Any combination of Accounting 98U-Z, Business 98U-Z, Computer Applications and Office Systems 98U-Z, and Computer Information Systems 98U-Z may be taken up to six times, not to exceed 18 units, for credit. During each internship, students will be placed at different employer locations, different working environments, and/or given different assignments within the same company or department--thus providing the students with various opportunities to learn different skills. Students may repeat the same internship location and working environment if the student, employer, and instructor believe it would provide the student with increased work experience.)
Off-campus supervised experiential education/internship for Business/Computer Systems Division students in research or business office environments related to student's major. Practical application of knowledge, skills and abilities acquired in student's major. Opportunity for additional hands-on training. Exposure to varied corporate, state and federal protocols, methodologies and practices in a professional environment.

CIS 108 Personal Computer Security Basics 4 Units
Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263; Computer Applications and Office Systems 90GA or equivalent.
(Also listed as Computer Applications and Office Systems 108. Students may enroll in either department, but not both, for credit.)
Four hours lecture (48 hours total per quarter).
Beginner's computer security course for small office or home users. Learn to stop hackers, worms, viruses, spyware, Web bugs and identity theft. Learn vulnerabilities found in Web browsers, e-mail and operating systems. Protect against online purchase dangers, install firewalls, manage cookies, restrict ports, analyze log files, evaluate wireless networks and examine encryption.

CIS 140A Automated Web Page Testing with Selenium IDE 2 Units
Prerequisite: Computer Information Systems 89A.
Co-requisite: Computer Information Systems 140A students must also enroll in Computer Information Systems 140B.
One hour lecture, three hours laboratory (48 hours total per quarter).
An introduction to the open-source Selenium Integrated Development Environment (SIDE) used for automating the testing of web pages. Topics covered will include: download and installation; user forums; record/replay; use of globbing and regular expressions within patterns; use of XPath and DOM expressions to locate page elements; test suite creation; the Selenium command set; the use of JavaScript snippets as arguments to Selenium commands; and the use of JavaScript within user extensions.

All courses are for unit credit and apply to a De Anza associate degree unless otherwise noted.
COOP Ed Work Experience

COOP 51 Occupational Work Experience 1 Unit
COOP 51W 2 Units
COOP 51X 3 Units
COOP 51Y 4 Units
Prerequisite: Must be working in a job related to declared occupational program/educational goal.
Fifty hours of paid employment per quarter for each unit of credit (4.17 hours of paid employment per week, per unit).
(May be taken until 24 units of Cooperative Education have been earned and in combination with all other Cooperative Education courses.)
Assess career/life development and work activities by introduction to the concept of career paths with occupational choices, and awareness of cultural/global diversity and generational differences in the work environment. Learn the S.M.A.R.T. principle for writing learning/performance objectives agreed upon by the student and employer that will be carried out during the quarter. View objectives in terms of a planned series of experiences for career/academic development. Participation in COOP will facilitate the career and academic development and decision-making process. Consultation with individually assigned faculty member.

COOP 53 Occupational Volunteer Community 1 Unit
Service Learning Internship
COOP 53W 2 Units
Prerequisite: Must be volunteering in a service-learning agency related to declared occupational program/educational goal; college recognized occupational program goal.
Fifty hours of unpaid volunteer hours for each unit of credit earned per quarter; volunteering in a nonprofit, service-learning organization (5.33 hours of unpaid volunteer internship per quarter for each unit of credit).
(May be taken until 24 units of Cooperative Education have been earned and in combination with all other Cooperative Education courses.)
Individually planned and supervised learning experiences related to occupational goals and designed to help meet human needs in the community. Desirable work habits, attitudes, skills, knowledge, career awareness, and exposure to cultural and generational diversity. Experience setting and achieving on-the-job learning/performance objectives related to occupational goals and appropriate to the service learning internship. Consultations with individually assigned faculty member.

COOP 57 General Work Experience 1 Unit
COOP 71W 2 Units
COOP 71X 3 Units
COOP 71Y 4 Units
Prerequisite: Must be employed.
Fifty hours of paid employment per quarter for each unit of credit (4.17 hours of paid employment per week, per unit).
(May be taken until nine units of this course have been earned, within a maximum of 24 total units in all Cooperative Education courses.)
Transferable skills gained under actual working conditions. Develop an understanding, appreciation and respect for work, peers, and an awareness of cultural/global diversity and generational differences in the work environment. Through holding a job, fulfilling work-related assignments and participating in on-campus activities, students are assisted in the process of developing a concept of self, understanding roles in the work environment and setting realistic goals. An assigned faculty coordinator helps students focus on job skills for transition into a career. Consultations with individually assigned faculty members.

CIS 161 Computer Forensics 4 Units
Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263; Computer Applications and Office Systems 150A or equivalent; Computer Applications and Office Systems 102L or equivalent.
(Also listed as Administration of Justice 161 and Computer Applications and Office Systems 161. Students may enroll in only one department for credit.)
Three hours lecture, two hours lecture-laboratory (60 hours total per quarter).
Pass-No Pass (P-NP) course.
Introduction to computer crime investigation processes. Guides students to becoming computer forensics investigators who can acquire and analyze data from a computer to be used as evidence. Topics include computer forensics tools, data recovery and retrieval, information gathering techniques, computer data preservation techniques, and computer crime investigation techniques. System Administrators, IT Managers, and Law Enforcement Officers, would benefit from taking this course as well as individuals wanting to become Computer Forensics Consultants.

CIS 170F Windows 7 Administration 4 1/2 Units
Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263; Computer Applications and Office Systems 102M.
(Also listed as Computer Applications and Office Systems 170F; Students may enroll in either department, but not both, for credit.)
Four hours lecture, one and one-half hours laboratory (66 hours total per quarter).
Provides knowledge and skills to setup, configure, use, and support Windows 7 operating system. Course covers Windows 7 features including installing, upgrading, configuring and troubleshooting. Learn how to configure Windows security, network connectivity and subsystems. Additional topics include configuring/troubleshooting mobile computing and learning how to use Windows 7’s built-in applications.

CIS 198 Install and Configure Windows Vista 1 Unit
Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263; Computer Applications and Office Systems 102L.
One hour lecture (12 hours total per quarter).
Provides knowledge and skills to setup, configure, use and troubleshoot Windows Vista software and security features.

CIS 200W Topics in Computer Information Systems 1 Unit
CIS 200X 2 Units
CIS 200Y 3 Units
CIS 200Z 4 Units
Credit course - Does not apply to De Anza Associate degree.
Requisite/Advisory: None.
One hour lecture for each unit of credit (12 hours total for each unit of credit per quarter).
(Any combination of Computer Information Systems 200W, 200X, 200Y and 200Z may be taken for up to six times, not to exceed 18 units, as long as the topics are different each time.)
A planned program of exposure to fundamental concepts and applications of selected Computer Information Systems topics. Concepts and theories as applied to the specific topic.

CIS 201Y Computer Forensics 3 Units
Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.
Four hours lecture, one and one-half hours laboratory (66 hours total per quarter).
Provides knowledge and skills to setup, configure, use and troubleshoot Windows 7 operating system. Course covers Windows 7 features including installing, upgrading, configuring and troubleshooting. Learn how to configure Windows security, network connectivity and subsystems. Additional topics include configuring/troubleshooting mobile computing and learning how to use Windows 7’s built-in applications.

CIS 200X 2 Units
CIS 200Y 3 Units
CIS 200Z 4 Units
Credit course - Does not apply to De Anza Associate degree.
Requisite/Advisory: None.
One hour lecture for each unit of credit (12 hours total for each unit of credit per quarter).
(Any combination of Computer Information Systems 200W, 200X, 200Y and 200Z may be taken for up to six times, not to exceed 18 units, as long as the topics are different each time.)
A planned program of exposure to fundamental concepts and applications of selected Computer Information Systems topics. Concepts and theories as applied to the specific topic.

CIS 161 Computer Forensics 4 Units
Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263; Computer Applications and Office Systems 150A or equivalent; Computer Applications and Office Systems 102L or equivalent.
(Also listed as Administration of Justice 161 and Computer Applications and Office Systems 161. Students may enroll in only one department for credit.)
Three hours lecture, two hours lecture-laboratory (60 hours total per quarter).
Pass-No Pass (P-NP) course.
Introduction to computer crime investigation processes. Guides students to becoming computer forensics investigators who can acquire and analyze data from a computer to be used as evidence. Topics include computer forensics tools, data recovery and retrieval, information gathering techniques, computer data preservation techniques, and computer crime investigation techniques. System Administrators, IT Managers, and Law Enforcement Officers, would benefit from taking this course as well as individuals wanting to become Computer Forensics Consultants.

CIN 80Z 3 Units
Requisite/Advisory: None.
Two hours lecture-laboratory for each unit of credit (24 hours total for each unit of credit per quarter).
(Formerly Counseling 100 and 100X respectively.)
Selected counseling topics with a focus on academic and personal development. Consultations with individually assigned faculty member.

COUN 200 Orientation to College 1/2 Unit
COUN 200X 1 Unit
Pass-No Pass (P-NP) course.
An orientation to De Anza College that includes programs, services, policies, degrees, certificates, transfer requirements, and college culture. Focus will be on strategies needed for academic success and the development of a two quarter Educational Plan.
### Dance

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

(See general education pages for the requirement this course meets.)  
Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or  
English as a Second Language 261, 262 and 263.  
(Also listed as Physical Education 22. Students may enroll in either department,  
but not both, for credit.)  
Two hours lecture-laboratory (24 hours total per quarter).  
(Any combination of Dance 22 and Physical Education 22 may be taken up to  
two times for credit.)  
Principles of dance and conditioning through floor work derived from ballet,  
contemporary dance and other psycho-physical disciplines. Topics may include  
but are not limited to: body mechanics, muscle groups critical to dance, flexibility,  
alignment, self assessment, dance injury prevention, and strengthening the mind-  
body connection.

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

(See general education pages for the requirement this course meets.)  
Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or  
English as a Second Language 272 and 273; Dance 22 or Physical Education 22.  
(Also listed as Physical Education 22K. Students may enroll in either department,  
but not both, for credit.)  
Two hours lecture-laboratory (24 hours total per quarter).  
(Any combination of Dance 22K and 22L, and Physical Education 22K and 22L  
may be taken up to six times for credit for the family of courses.)  
Introduces to the discipline and creative art of classical ballet, including  
the development of elementary movement techniques, a working ballet vocabulary,  
 exposure to great works and artists from a global perspective, theory and practice  
of barre and center floor exercises.

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

(See general education pages for the requirement this course meets.)  
Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or  
English as a Second Language 272 and 273; Dance 22K or Physical Education 22K.  
(Also listed as Physical Education 22L. Students may enroll in either department,  
but not both, for credit.)  
Four hours lecture-laboratory (48 hours total per quarter).  
(Any combination of Dance 22K and 22L, and Physical Education 22K and 22L  
may be taken up to six times for credit for the family of courses.)  
Principles and practice of the discipline and creative art of classical ballet, combining:  
traditional techniques of Russian, French, and Italian schools; barre and center floor  
work emphasizing alignment/centering, motion through space, and the acquisition  
of an intermediate working ballet vocabulary.

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

(See general education pages for the requirement this course meets.)  
Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or  
English as a Second Language 272 and 273.  
(Also listed as Physical Education 23A. Students may enroll in either department,  
but not both, for credit.)  
Two hours lecture-laboratory (24 hours total per quarter).  
(Any combination of Dance 23A and 23B, and Physical Education 23A and 23B  
may be taken up to six times for credit for the family of courses.)  
Introduction to the discipline and creative art of contemporary dance. Student will  
be exposed to a basic movement theory, and repertoire from global artists.

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

(See general education pages for the requirement this course meets.)  
Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or  
English as a Second Language 272 and 273.  
(Also listed as Physical Education 23B. Students may enroll in either department,  
but not both, for credit.)  
Four hours lecture-laboratory (48 hours total per quarter).  
(Any combination of Dance 23A and 23B, and Physical Education 23A and 23B  
may be taken up to six times for credit for the family of courses.)  
The discipline and creative art of contemporary dance focusing on practice, theory,  
technique, and movement explorations in time and space, developing a working  
intermediate contemporary dance vocabulary.

**DANC 23H**  
**Dance Composition**  
2 Units  

Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or  
English as a Second Language 261, 262 and 263.  
(Also listed as Physical Education 23H. Students may enroll in either department,  
but not both, for credit.)  
Four hours lecture-laboratory (48 hours total per quarter).  
(Any combination of Dance 23H and Physical Education 23H may be taken twice  
for credit, for a total of four units.)  
Introduction to the fundamental elements and techniques of individual and group  
dance composition.

**DANC 23L**  
**Theory and Technique of Hip-Hop I**  
1 Unit  

(See general education pages for the requirement this course meets.)  
Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or  
English as a Second Language 272 and 273.  
(Also listed as Physical Education 23L. Students may enroll in either department,  
but not both, for credit.)  
Two hours lecture-laboratory (24 hours total per quarter).  
(Any combination of Dance 23L and 23M, and Physical Education 23L and 23M  
may be taken up to six times for credit for the family of courses.)  
An introduction to the discipline of creative arts through hip-hop dance with an  
integrated fitness approach that focuses on developing the stabilization muscles  
of the center of the body. Concentration will be on muscles of the torso, back,  
hips, inner and outer thighs, chest and abdominals will be used in conjunction  
with breathing, posture, and muscle awareness. Exposure to great works and  
artists of the field. Development of a working hip-hop dance vocabulary. Theory  
and practice of basic technique.

**DANC 23M**  
**Theory and Technique of Hip-Hop II**  
2 Units  

(See general education pages for the requirement this course meets.)  
Prerequisite: Dance 23L or Physical Education 23L.  
Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or  
English as a Second Language 272 and 273.  
(Also listed as Physical Education 23M. Students may enroll in either department,  
but not both, for credit.)  
Four hours lecture-laboratory (48 hours total per quarter).  
(Any combination of Dance 23L and 23M, and Physical Education 23L and 23M  
may be taken up to six times for credit for the family of courses.)  
Explorations in the discipline of creative arts through the theory and practice of  
hip-hop dance intermediate/advanced level technique, with an integrated fitness  
approach that focuses on developing the stabilization muscles of the center of  
the body. Concentration will be on muscles of the torso, back, hips, inner and  
outer thighs, chest and abdominals will be used in conjunction with breathing,  
posture, and muscle awareness. Exposure to great works and multicultural artists  
of the field. Development of a working hip-hop dance vocabulary and performance  
skills.

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

(See general education pages for the requirement this course meets.)  
Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or  
English as a Second Language 261, 262 and 263.  
(Also listed as Physical Education 24A. Students may enroll in either department,  
but not both, for credit.)  
Two hours lecture-laboratory (24 hours total per quarter).  
and 24C may be taken up to six times for credit for the family of courses.)  
Introduction to the discipline and creative art of social dance. Exposure to basic  
forms of social dance in a ballroom context. Developing a working vocabulary  
of traditional social dance movements and an understanding of the cultural and  
historical contexts that produced the specific dance styles.

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

(See general education pages for the requirement this course meets.)  
Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or  
English as a Second Language 261, 262 and 263.  
(Also listed as Physical Education 24B. Students may enroll in either department,  
but not both, for credit.)  
Two hours lecture-laboratory (24 hours total per quarter).  
and 24C may be taken up to six times for credit for the family of courses.)  
Introduction to the discipline and creative art of social dance. Exposure to basic  
forms of social dance in a ballroom context. Developing a working vocabulary  
of traditional social dance movements and an understanding of the cultural and  
historical contexts that produced the specific dance style.

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

(See general education pages for the requirement this course meets.)  
Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or  
English as a Second Language 261, 262 and 263.  
(Also listed as Physical Education 24C. Students may enroll in either department,  
but not both, for credit.)  
Two hours lecture-laboratory (24 hours total per quarter).  
and 24C may be taken up to six times for credit for the family of courses.)  
The art of social dance at the advanced level. Expanded 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.

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All courses are for unit credit and apply to a De Anza associate degree unless otherwise noted.
DANC 25A  Theory and Technique of Salsa Dance I  1 Unit
(See general education pages for the requirement this course meets.)
Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or
English as a Second Language 272 and 273.
(Also listed as Physical Education 25A. Students may enroll in either department,
but not both, for credit.)
Two hours lecture-laboratory (24 hours total per quarter).
(Any combination of Dance 25A and Physical Education 25A may be taken up to
three times for credit as long as the topics are different each time.)
Introduction to the discipline and creative art of salsa dance. Exposure to basic
forms of social dance in a salsa dance context. Developing a working vocabulary
of traditional salsa dance movements and an understanding of the cultural and
historical contexts that produced the specific dance styles.
DANC 27A  Dance Workshop (Student Productions, the De Anza Dancers)  1 Unit

DANC 27B  2 Units
DANC 27C  3 Units
DANC 27D  4 Units
Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or
English as a Second Language 261, 262 and 263.
Two hours lecture-laboratory for each unit of credit (24 hours total for each unit
of credit per quarter).
(Any combination of Dance 27A, 27B, 27C and 27D may be taken up to three
times for credit.)
Introduction to the basic techniques of dance production and performance.
DANC 37A  Theory and Technique of Jazz Dance I  1 Unit
(See general education pages for the requirement this course meets.)
Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or
English as a Second Language 261, 262 and 263.
(Also listed as Physical Education 37A. Students may enroll in either department,
but not both, for credit.)
Two hours lecture-laboratory (24 hours total per quarter).
(Any combination of Dance 37A and 37B, and Physical Education 37A and 37B
may be taken up to six times for credit.)
Introduction to the discipline and creative art of jazz dance. Body conditioning,
recreation, artistic expression, and entertainment, exploring the history, traditions
and works of outstanding artists. The development of a working vocabulary; and practice of intermediate techniques.
DANC 37B  Theory and Technique of Jazz Dance II  2 Units
(See general education pages for the requirement this course meets.)
Prerequisite: Dance 37A or Physical Education 37A.
Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or
English as a Second Language 261, 262 and 263.
(Also listed as Physical Education 37B. Students may enroll in either department,
but not both, for credit.)
Four hours lecture-laboratory (48 hours total per quarter).
(Any combination of Dance 37A and 37B, and Physical Education 37A and 37B
may be taken up to six times for credit.)
Explores elements of time, space, shape and motion as related to jazz dance.
Body conditioning, exposure to major international influences, artists, and works.
The development of a working vocabulary in significant jazz dance styles; and
practice of intermediate level techniques.
DANC 38A  Appreciation of Dance  4 Units
(See general education pages for the requirement this course meets.)
Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or
English as a Second Language 272 and 273.
Four hours lecture (48 hours total per quarter).
A study of dance as a cultural phenomenon, form of communication, socialization,
recreation, artistic expression, and entertainment, exploring the history, traditions
and works of outstanding artists.
DANC 48  Technical Production for Dance and Theatre  2 Units
(Formerly Dance 58.)
Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or
English as a Second Language 272 and 273.
(Also listed as Theatre 48. Students may enroll in either department, but not
both, for credit.)
Four hours lecture-laboratory (48 hours total per quarter).
(Any combination of Dance 48 and Theatre 48 may be taken up to three times
as long as the topics/projects in musical drama, dance concert, etc. are different
each time.)
Introduction to the theoretical, technical and craft of dance and theatre production
with practical experience in public presentation.

DANC 49A  Topics in Theory and Technique of World Dance  1 Unit
(Formerly Dance 50A.)
Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or
English as a Second Language 272 and 273.
(Also listed as Physical Education 49A. Students may enroll in either department,
but not both, for credit.)
Two hours lecture-laboratory (24 hours total per quarter).
(Any combination of Dance 49A and Physical Education 49A may be taken up to
six times as long as the topics in specific dances and cultures are different each
time.)
Introduction to the art of world dance. Course will provide exposure to forms of
dance from an international perspective. Students will learn to perform the basic
skills of classical, traditional, and folk dances from various world cultures, while
developing a working vocabulary of traditional dance movements. Students will
attempt to gain an understanding and appreciation of the cultural and historical
contexts that produced the specific dance forms.
DANC 65B  Theory and Technique of Salsa Dance II  2 Units
(See general education pages for the requirement this course meets.)
Prerequisite: Dance 25A or Physical Education 25A.
Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or
English as a Second Language 261, 262 and 263.
(Also listed as Physical Education 65B. Students may enroll in either department,
but not both, for credit.)
Four hours lecture-laboratory (48 hours total per quarter).
(Any combination of Dance 65B or Physical Education 65B may be taken up to
six times for credit.)
An intermediate/advanced discipline and creative art of salsa dance. Exposure to
intermediate/advanced forms of social dance in a salsa dance context. Developing
a working vocabulary of traditional salsa dance movements and an understanding
of the cultural and historical contexts that produced the specific dance styles.
DANC 78L  Special Topics in Dance  1/2 Unit
DANC 78M  1 Unit
DANC 78N  2 Units
DANC 78P  3 Units
DANC 78Q  4 Units
Prerequisite: Enrollment by audition.
Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or
English as a Second Language 261, 262 and 263.
(Also listed as Physical Education 78L-Q. Students may enroll in either
department, but not both, for credit.)
Two hours lecture-laboratory for each unit of credit (24 hours total for each unit
of credit per quarter).
(Any combination of Dance 78L-Q and Physical Education 78L-Q may be taken up
to three times for credit, not to exceed 12 units, as long as the topics are
different each time.)
Special topics that incorporate theory and practice within the discipline of dance.

Drama
(See Dance and/or Theatre Arts)

Economics

ECON 1  Principles of Microeconomics  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 (48 hours total per quarter).
An introduction to microeconomics. Topics covered will include supply and
demand, elasticity, marginal cost and revenue, and consumer surplus.
ECON 2  Principles of Macroeconomics  4 Units
(See general education pages for the requirement this course meets.)
Advisory: English Writing 1A or English as a Second Language 5.
Four hours lecture (48 hours total per quarter).
Examines fundamental microeconomic issues; the allocation of resources and the
production function, pricing of output and factors of production; the distribution
of wealth and income; consumer motivations and behavior; the nature and behavior
of business firms and markets under various degrees of competition; current problems.