"C" Course Descriptions

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CHEMISTRY

CHICANO STUDIES

CHILD DEVELOPMENT

CHINESE
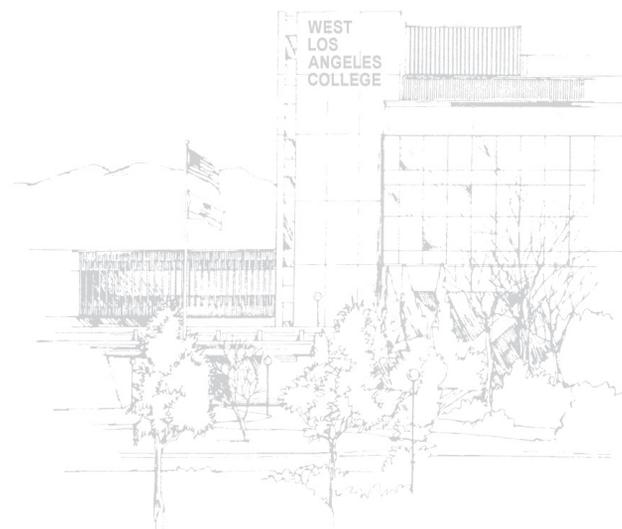
CINEMA

COMPUTER APPLICATIONS AND OFFICE
   TECHNOLOGIES

COMPUTER SCIENCE INFORMATION
   TECHNOLOGY

CORRECTIONS

31 Business English (3) CSU
This course offers an intensive review of the techniques and mechanics of English: grammar, sentence structure, business vocabulary, capitalization, punctuation, various business letter styles, proofreadersí symbols, and website reference tools as specifically applied to the field of business. *Note: Required of all Business and CAOT majors.*

32 Business Communications (3) CSU
This course covers the principles and techniques of effective business writing which includes the development of the ability to analyze, organize and compose various types of written and oral business communications. Emphasis is placed on writing clear, concise and persuasive letters, memos and reports, and the psychology of business letter composition and communications.

38 Business Computations (3) CSU
This course provides a comprehensive study of business mathematics and reviews basic mathematics such as decimals, fractions, and percentages. It also covers the topics of bank services, payroll, the mathematics of buying and selling, interest and loans, taxes, cash and trade discounts, depreciation and other business computations. This course is intended for students interested in pursuing careers in business.

931 Cooperative Education - Business (3) (RPT 3)
941 Cooperative Education - Business (4) (RPT 3)

CHEMISTRY

51 Fundamentals of Chemistry I (5) UC:CSU
Recommended: One year of high school algebra, or Mathematics 115.
This course is a descriptive course in inorganic and organic chemistry. Topics include the metric system of measurement; chemical symbols, formulas and nomenclature systems; chemical equations; physical properties including density, solubility and states of matter; chemical properties; acids, bases, buffers and pH; basic principles of equilibrium and an introduction to radioactivity. Organic topics focus on functional group identification including hydrocarbons, organic halides, alcohols, ketones, acids, esters, amines, carbohydrates, lipids and proteins. This course is designed for Nursing and other Allied Health majors, students in environmentally hazardous materials, elementary education or liberal arts who do not intend to take Chemistry 101.
UC Transfer Credit Limit: A maximum of one course from Chemistry 51 or 60. No credit for Chemistry 51 or 60 if taken after Chemistry 101.

60 Introduction to General Chemistry (5) UC:CSU
(Formerly Chemistry 10)
Prerequisite: One year of high school algebra, or Mathematics 115.
This basic chemistry course presents elementary principles of general chemistry, including nomenclature and problem solving. Students whose previous chemistry background is inadequate for Chemistry 101 should take this course in preparation for Chemistry 101. Chemistry 60 is also recommended for students who have been away from high school chemistry for more than two years.
UC Transfer Credit Limit: A maximum of one course from Chemistry 51 or 60. No credit for Chemistry 51 or 60 if taken after Chemistry 101.

101 General Chemistry I (5) UC:CSU *(Formerly Chemistry 1)*
Prerequisites: (1) High school chemistry or Chemistry 60 with a grade of "C" or better; (2) A minimum of two years of high school mathematics or Mathematics 125 or equivalent.
This is a basic course emphasizing principles and theories. It includes discussions of chemical stoichiometry, atomic and molecular structure and the periodic table, gases, liquids, solids, solutions, oxidation reduction, acids and bases, and an introduction to chemical thermodynamics. The laboratory emphasizes basic laboratory skills, chemical principles, and quantitative relationships.
UC Transfer Credit Limit: No credit for Chemistry 51 or 60 if taken after Chemistry 101.

102 General Chemistry II (5) UC:CSU *(Formerly Chemistry 2)*
Prerequisite: Chemistry 101 with a grade of "C" or better.
This course is a continuation of Chemistry 101, with an introduction to chemical kinetics, chemical equilibrium with emphasis on aqueous equilibria, electrochemistry, nuclear chemistry, organic chemistry, and descriptive inorganic chemistry. The laboratory includes both quantitative experiments and qualitative analysis. *Note: No UC credit for Chemistry 51 or 60 if taken after Chemistry 101.*

211 Organic Chemistry for Science Majors I (5) UC:CSU
(Formerly Chemistry 14)
Prerequisite: Chemistry 102 with a grade of "C" or better.
The student is introduced to structure, bonding, naming, stereochemistry and functional group chemistry with emphasis on reactions and reaction mechanisms. In the laboratory, the essential skills of preparation, isolation, purification and identification of organic compounds are presented.

212 Organic Chemistry for Science Majors II (5) UC:CSU
(Formerly Chemistry 18)
Prerequisite: Chemistry 211.
Chemistry 212 is a continuation of Chemistry 211 with additional emphasis on the remaining functional groups as well as on multi-step synthesis and reaction mechanisms in stereochemistry and modern instrumental and analytical methods. Special attention is given to reactions and organic compounds of biochemical importance. Significant laboratory time is devoted to synthesis of complex organic compounds.

CHICANO STUDIES

8 The Mexican American in the History of the United States (3) UC:CSU (Same as History 44)
The course will introduce students to the background of the political, social, economic and cultural development of the United States from Reconstruction to the present, with particular emphasis on the contributions of the Mexican- American to the development of the modern United States. There will also be discussion of key events in the history and development of Mexico, when appropriate. Also included is a continued survey of the United States Constitution.
UC Transfer Credit Limit: A maximum of one course from Chicano Studies 8; History 12, 13, 44.

CHILD DEVELOPMENT

1 Child Growth and Development (3) UC:CSU
Recommended: It is recommended that all Child Development students take the Math and English assessment placement test before or concurrently with this course. Note: This course is a prerequisite for Child Development 3, 4, 22, and 23. Required for Teaching Permit.
This is an introductory Child Development course covering the theoretical concepts of human development, focusing on growth and development from conception through adolescence. The physical, cognitive, and psychosocial domains of development as well as the ways in which nature and environment influence growth will be studied within cultural and family context.

2 Early Childhood: Principles and Practices (3) CSU
Prerequisite: Verification of an annual tuberculosis test. Note: This course is a prerequisite for Child Development 3, 4, 22, and 23. Required for Teaching Permit.
The student becomes aware of various types of educational programs available to children 0-8 years of age. The student will be exposed to career opportunities, the role and responsibilities of a teacher, and age appropriate curriculum in Early Childhood programs. The student will study the field from a historical and cultural perspective. The student will study the curriculum components and teaching modalities that are critical in an early learning program.

3 Creative Experiences for Children I (3) CSU
Prerequisite: Child Development 1 and 2.
Note: This course is a prerequisite for Child Development 22 and 23. Required for Teaching Permit.
Many types of creative experiences for young children are explored including painting, clay modeling, music, drama, art materials and language development. The student has an opportunity to learn to set up, control and evaluate children's experiences in a classroom setting.

4 Creative Experiences for Children II (3) CSU
Prerequisite: Child Development 1 and 2.
Note: This course is a prerequisite for Child Development 22 and 23. Required for Teaching Permit.
Many types of creative experiences for young children are explored including sensory motor development, language development, literacy development, math, science, perceptual motor development, social studies. Anti-bias training, multi-cultural, language arts, age appropriate curriculum, pre-kindergarten guidelines, dramatic play and group time activities are also covered. The student has an opportunity to learn how to set up, control and evaluate children's experiences in a classroom setting. The student will design and implement lesson plans that reflect the content of the curriculum components in this area of the curriculum of an early learning program.

10 Health, Safety, and Nutrition (3) CSU
Recommended: Child Development 1 and 2. Required for Teaching Permit.
This course includes information on the nutritional needs and physical and mental well being of children from birth to adolescence. Information dealing with special problems/disabilities is included. Habits and attitudes toward health are discussed. Community resources which are available to assist in the physical and mental well-being of the child are explored.

11 Home, School and Community Relations (3) CSU
Recommended: Child Development 1 and 2.
A study is made on the effect of children's homes, schools and communities on children's development. Special emphasis is placed on the dynamics of human relations in the multicultural urban setting. Emphasis is placed on familiarizing students with techniques used in parent-teacher conferences to enable them to relate better to the families of the children in their classrooms. Students are taught to perceive parents as partners in their child's educational experience.

22 Practicum in Child Development I (4) CSU
Prerequisites: Child Development 3 and 4 with a grade of "C" or better. Corequisite: Child Development 48.
Verification of an annual tuberculosis test. Live scan fingerprinting is not required for Practicum, but some institutions might request it. Practicum students are exempt by the State. Practicum students Work with nursery school children is conducted under the direction of a nursery school staff member and is supplemented by the supervision of the course instructor. Emphasis is placed on developing, implementing and evaluating classroom experiences for young children.

23 Practicum in Child Development II (4) CSU
Recommended: Child Development 3, 4, and 22 with a grade of "C"or better. Corequisite: Child Development 42. A tuberculosis test and fingerprinting is required.
This is the second semester of practicum teaching experience in a different setting and under the supervision of a master teacher and college instructor. This course provides the practical application of theories covered in recommended courses.

30 Infant and Toddler Studies I (3) CSU
Recommended: Child Development 1.
This course will include a study of infant and toddler development from birth through toddler-hood. The birth process, attachment, temperament and development physically, cognitively, socially and emotionally will be included. Care giving and environments that support development will be covered. Assessments and observations will be implemented by students in a fieldwork format.

31 Infant and Toddler Studies II (3) CSU
The principles of inclusive, respectful care giving for infants and toddlers within a variety of program designs will be studied and analyzed. Skills for designing appropriate curriculum and environments will be included in the content of the course. Health, safety and licensing requirements will be examined. Modalities for communicating with parents and providing resources for support will be discussed as part of this course.

34 Observing and Recording Children's Behavior (3) CSU
This course includes observing, recording and interpreting children's behavior in a variety of settings. Diaries, anecdotes and other forms of written and oral records are explored and used.

35 Fostering Literacy Development in Young Children (3)
This course examines early literacy as the beginning stages of learning to read and write. The course surveys ways to promote early literacy through curriculum, assessment, talking, playing, reading, writing, and learning the code. The use of developmentally appropriate approaches in promoting and reinforcing early literacy are implemented in hands-on projects. Students are exposed to recognizing the alphabet as a code for the sounds of language.

38 Administration and Supervision of Early Childhood Programs I (3) CSU
Recommended: Child Development 1, 2 and 11.
The principles and practices of nursery school organization and administration covered include organizational structure, budgeting, personnel policies and practices, records, statistics, reporting and relationship with community resources.

39 Administration and Supervision of Early Childhood Programs II (3) CSU
Recommended: Child Development 38.
An in-depth study of budget and staffing, including the use of computers. The course will include proposal writing, advocacy, staff relations, in-service training, working with parents, dealing with supervising agencies or boards, professional activities and current research in the field, as well as changes in the laws.

42 The Child in a Diverse Society (3) CSU
Corequisite: Child Development 23.
This course presents the philosophy and methods related to working with young children and families within a diverse society, including race, language, culture, gender, age, social class and children with special needs. Curriculum development and environmental designs will be studied from an inclusive perspective.

44 Programs for Children with Special Needs I (3) CSU
This course focuses on accommodating and adapting the physical environment, instructional strategies and curriculum to meet the needs of differently-abled children and their families. Legal mandates and the impact of laws and legislation will be examined in respect to the impact on children and their families. Understanding the process of assessment and developing an Individual Family Service Plan will be analyzed and discussed.

45 Programs for Children with Special Needs II (3) CSU
This course identifies the political and social implications that affect special education, and it identifies the different categories of disabilities. The Individual Education Plan is discussed and evaluated. Students are exposed to techniques for identifying and implementing goals and objectives for children with special needs. Teaching techniques and curriculum activities are discussed, designed and implemented in the class projects.

46 School Age Programs I (3) CSU
The student will be introduced to school age programs. It is designed for those planning to work in before- and after-school childcare. Topics to be covered will include growth and development, creative experiences, and developmentally appropriate practices and environments. Techniques for guiding children's behavior and communication will be discussed.

47 School Age Programs II (3) CSU
Students will be introduced to the different types of school age childcare programs. Topics to be covered will include the child in context to the family, community and society. The physical environment and the modalities for facilitating learning will be discussed and analyzed. Opportunities to develop and implement age- and content appropriate activities for school age children will be executed in classroom projects.

48 Positive Guidance in Early Childhood Settings (3) CSU
Corequisite: Child Development 22.
This course will explore developmentally appropriate management techniques or children in early childhood settings. Emphasis will be placed on developing culturally sensitive individualized plans for behavior management of traditional and special needs children.

60 Introduction to Family Child Care I (1)
This course is designed for family childcare providers and persons entering the profession. Focus is placed on business and environmental considerations, age appropriate activities for multi-ages. The importance of maintaining accurate business records will be discussed. Identifying and maintaining a quality program will be discussed in terms of such aspects as: health, safety, nutrition, physical environment, and communication with parents and children.

61 Introduction to Family Child Care II (1)
This course is designed for students who are interested in family day care. It will focus on business management, business law, insurance, budget, contracts and record keeping, taxes and marketing. Students will explore marketing techniques and design advertising materials and contracts.

62 Developmental Profiles: Pre-Birth Through Age Eight (2)
This course defines concise profiles of physical, emotional, social and intellectual development from pre-birth through age eight. It reviews commonly used terms and concepts of child development. Students will examine observation and assessment techniques to enable them to evaluate children.

63 Creative Curriculum in a Family Child Care Setting (2)
This course has an emphasis on play and creative experiences for children in the home setting. Demonstrations and participation in dramatic play, manipulatives, music, math, science, art, crafts, and language will be covered, with emphasis placed on promoting an environment and techniques that will foster creativity and individuality in children.

65 Adult Supervision and Early Childhood Mentoring (2)
This course is a study of the modalities and principles of supervising teachers, staff and student teachers in an early childhood program. Emphasis is placed on the roles of the director, teacher, staff and student teacher. The course will review leadership styles, methods and principles of supervising student teachers in early childhood programs. The course emphasizes the role of classroom teachers who function as mentors to new teachers while simultaneously addressing the needs of children, parents, and staff. This course identifies and examines the roles of supervisors, teachers, support staff, and the child and the family. Different styles of supervising are discussed and evaluated.

185 Directed Study - Child Development (1) CSU
285 Directed Study - Child Development (2) CSU
385 Directed Study - Child Development (3) CSU
These courses allow the student to pursue Directed Study in Child Development on a contract basis under the direction of a supervising instructor. *Note: A maximum of 6 units in Directed Study may be taken for credit.*

911 Cooperative Education - Child Development (1)
921 Cooperative Education - Child Development (2)
931 Cooperative Education - Child Development (3)
941 Cooperative Education - Child Development (4)
(See the "Cooperative Education" Section for guidelines.)

CHINESE

1 Elementary Chinese I (5) UC:CSU
This course stresses the fundamentals of pronunciation, grammar, practical vocabulary, useful phrases, and the ability to understand, speak, read and write basic Mandarin Chinese. It includes an introduction to Chinese civilization and culture.

21 Fundamentals of Chinese I (3) CSU
This course provides the first half of Elementary Chinese 1. It stresses the fundamentals of pronunciation, grammar, practical vocabulary, useful phrases, and the ability to understand, speak, read, and write basic Mandarin Chinese. It includes an introduction to Chinese civilization and culture. *NOTE: Chinese 21 and Chinese 22 together are equivalent to Chinese 1.*

22 Fundamentals of Chinese II (3) CSU
Prerequisite: Chinese 21 with a grade of "C" or better.
This course provides the second half of Elementary Chinese 1. It stresses the fundamentals of pronunciation, grammar, practical vocabulary, useful phrases, and the ability to understand, speak, read, and write basic Mandarin Chinese. It includes an introduction to Chinese civilization and culture. *NOTE: Chinese 21 and Chinese 22 together are equivalent to Chinese 1.*

CINEMA

(Also See Film Production, Theater, and Television)

1 Introduction to Motion Picture Production (3) UC:CSU
(Same as Theater 501)
A comprehensive introduction to film video production techniques and equipment. Proper procedures are explained for the use of cameras, lenses, filters, film stocks, lights, microphones, audio recorders, and other motion editing picture equipment. Attention is also given to production planning and post-production as well.

2 Beginning Motion Picture Workshop (3) CSU
This is an introductory course in practical film-making, including script, storyboard, direction, cinematography, sound and editing techniques. Each student will be responsible for the making of short films.

3 History of Motion Pictures (3) UC:CSU
(Same as Theater 505)
History of the development of motion pictures, with examples, from their beginnings to the present day. Emphasis is placed on the American feature film.

4 History of the Documentary Film (3) UC:CSU
The development of films dealing with the truth. Films types seen and discussed include: historical, animated, propaganda, educational, commercial, cinema verite and direct cinema. Students will develop critical standards for judging documentary films.

5 Introduction to Screenwriting (3) UC:CSU (RPT 1)
Course work consists of writing screenplays based on the Hollywood technique known as "The Heroes Journey." Students will pitch their script to a studio and/or network executive.

6 Motion Picture Photography (3) CSU
Prerequisite: Cinema 1 and 3 with satisfactory grades or better.
Introduction to cinematography, including optics, photo emulsions, camera operation, laboratory procedures, terminology and aesthetics. Students will do individual and group projects using 16mm or digital video camera equipment.

7 Advanced Cinematography and Creative Techniques (3) CSU
Prerequisite: Cinema 6 with a satisfactory grade or better.
An advanced course in creative cinematography covering sophisticated professional equipment and techniques used in the motion picture industry. Emphasis is placed on lighting and current industry standards.

9 Motion Picture Sound (3) CSU
Prerequisite: Cinema 1, 2, 3 and 4 with satisfactory grades or better.
Students learn the basics of motion picture production and post-production sound. Students use digital audio recorders, microphones and booms and learn how to properly record sound. Students learn to loop and mix sound using a digital audio program.

10 Introduction to Film Directing (3) CSU
Prerequisite: Cinema 1 and 3 with satisfactory grades or better.
Introduction to the crafts of acting and directing for the film medium; with emphasis on the visualization of the screen play, the junction of the actor in interpreting the script, and the role of the director in handling actors in the production of a film.

18 Main Currents in Motion Pictures (3) UC:CSU
In this course, students will explore the major categories of movies, including comedy, science fiction, suspense, the western, horror, and the musical. Most weeks feature in-class screenings of significant feature films.

20 Business Aspects of Motion Picture Production (3) CSU
Prerequisite: Cinema 1 and 3 with satisfactory grades or better. Survey of business practices including financing, production and distribution.

25 Producing Digital Video Features (3) CSU
Digital video (DV and HD) is transforming traditional feature film production and broadening distribution possibilities for independent productions. Students explore this new frontier and its requirements for intellectual property, financing, contracts, production, formats, marketing and alternative distribution outlets including internet web sites and downloads.

32 Editing Fundamentals (3) CSU
Prerequisite: Cinema 1, 2, 3 and 4 with satisfactory grades or better.
Intermediate students learn the principles of editing using digital non-linear editing equipment.

33 Digital Video Production Workshop I (3) CSU
Prerequisite: Cinema 1, 2, 3 and 4 with satisfactory grades or better.
Intermediate film and television students produce short video projects using digital video cameras and editing systems.

34 Motion Pictures Soundstage Production Practicum (3) CSU
Prerequisite: Cinema 5, 6, 7, 32 AND 9 or 10 with satisfactory grades or better.
Designed for students to gain practical experience in a specific area of motion picture soundstage production in order to develop the necessary skills needed in that field of the industry. Included skills are screenwriting, directing, production management, lighting, cinematography, sound recording and editing.

60 Entertainment Industry Careers Below-the-Line Production Skills (3) CSU
Introductory course to the skills needed to obtain and keep a position in the motion picture or television industries. Skills taught include working with production managers, first assistant directors, production designers, and script supervisors, with a focus on basic safety issues in each department

107 Understanding Motion Pictures (3) UC:CSU
This course analyzes the elements that make film an art form, including visual composition, color, music, acting, editing, lighting, story, and sound. This course also includes regular screenings of classic and contemporary motion pictures.

111 Cinema: Developing Content for Movies (3) CSU
This survey course presents an overview of the art and business of the film industry, and explains the cultural function and aesthetic significance of the medium. It analyzes how movies are made today, discusses how a project evolves from concept, through script, to production.

112 Script Analysis (3) CSU
Prerequisite: English 101 with a satisfactory grade or better.
This course will train students to write a professional evaluation ("coverage") identifying strengths and weaknesses of literary material submitted to the producers of film and television. The studentsí written analysis of scripts will become part of their professional portfolio.

125 Film Production Workshop I (3) CSU (RPT 3)
Prerequisite: Cinema 1
Introduction to 16 mm film making focuses on all technical and creative aspects of the medium. This hands-on course includes developing the script, filming, and post-production culminating in a finished film.

931 Cooperative Education - Cinema (3) CSU (RPT 3)

COMPUTER APPLICATIONS AND OFFICE TECHNOLOGIES

(Formerly Office Administration)

1 Computer Keyboarding I (3) CSU
Mastery of the keyboard and the operations of computers are developed. Emphasis is placed on formatting and producing letters and tables using a popular word processing program. The student should achieve a minimum keyboarding speed of 30 words per minute. *Note: Students with the ability to type 35 words per minute and to create basic documents in Microsoft Word should enroll in Computer Applications and Office Technologies (CAOT) 2. MODULARIZED A, B, C.*

2 Computer Keyboarding II (3) CSU
Prerequisite: CAOT 1, or the ability to type 35 words per minute and create specialized documents in Microsoft Word.
Skills developed in this course include correct techniques in producing specialized documents using a popular word processing program. The student should achieve a minimum keyboarding speed of 40 words per minute. *MODULARIZED A, B, C.*

3 Computer Keyboarding III (3) CSU
Prerequisite: CAOT 2, or the ability to type 40 words per minute and create specialized documents in Microsoft Word.
Skills developed in this course include correct techniques for developing speed and accuracy in typing business letters and memorandums, special business forms, rough drafts, and statistical and business reports. The student should achieve a minimum typing speed of 40 words per minute.

23A Legal Secretarial Procedures IA (1)
23B Legal Secretarial Procedures IB (1)
23C Legal Secretarial Procedures IC (1)
This sequence of courses prepares individuals with the knowledge and skills to perform secretarial duties and assume specific responsibilities in a legal office.

39 Word Processing: Keyboarding and Operations (3) CSU (RPT 2)
Recommended: The ability to type 35 words per minute.
This course teaches word processing skills, such as inputting, formatting, editing, and printing using WordPerfect. Students must arrange for additional lab time each week.

75 Word Processing: Equipment Operation (2)
Recommended: The ability to type 25 words per minute.
This class presents word processing skills on the microcomputer, including keyboarding, editing, and printing various types of documents. It is designed for all students, including non-business majors.

75A Word Processing: Equipment Operation A (1) CSU
75B Word Processing: Equipment Operation B (1)

79 Word Processing Applications (3) CSU
This course teaches advanced word processing skills such as mail merge, advanced formatting, tables and graphics using Microsoft Word or Word Perfect.

84 Word Processing Concepts in Information Systems (3) CSU (RPT 2)
Prerequisite: The ability to type 35 words per minute.
This course teaches word processing skills, including inputting, editing, formatting and printing documents using Microsoft Word. (Replaces CAOT 35 in Paralegal and CAOT programs.) Students must arrange for additional lab time each week.

88 Desktop Publishing Concepts in Information Systems (3) CSU
Provides information and hands on training using a personal computer, printers and various desktop publishing software. Includes producing camera ready, near typeset quality reports, newsletters, brochures, flyers, business forms, and presentations.

93 Legal Document Production (2) CSU
Selection and preparation of formatted documents specific to law offices.

101 Hands-On Internet (1)
This course introduces students to the Internet and e-mail for personal and business applications. Students will develop competency in performing Internet research for personal, consumer, legal, and business applications.

110 Presentation Design Concepts in Information Systems (3)
This course is designed to teach the fundamentals of presentation creation, enhancement, and modification. Students learn to create, edit, format, show, and print presentations including the use of PowerPoint templates, outlines, clip art, charts, tables, animation, and sound.

911 Cooperative Education - CAOT (1)
921 Cooperative Education - CAOT (2)
931 Cooperative Education - CAOT (3)
941 Cooperative Education - CAOT (4)
(See "Cooperative Education for requirements.)

COMPUTER SCIENCE INFORMATION TECHNOLOGY

For all Computer Science Information Technology courses, a maximum of six courses - regardless of department - is acceptable for transfer to UC campuses.

901 Introduction to Computers and Their Use (3) UC:CSU (RPT 3)
This course introduces students to fundamental computer literacy concepts. Students will learn to use Windows 7 on PC-compatible computers, as well as a word processing program (Word), spreadsheet program (Excel) a presentation tool (PowerPoint), a database management program (Access), and other applications.

902 Introduction to Computer Science (3) UC:CSU (RPT 3)
This course is designed to take the student through the various aspects of writing algorithms to be used in computer programming. It introduces students to computer architecture, BASIC language programming, and number systems. It covers functions, arrays, and other basic data types.

904 Internet Security Awareness (1) (RPT 3)
This course presents a basic introduction to practical computer security for all users, from students to home users to business professionals. Topics include Privacy and Property in Cyberspace, E-mail Vulnerabilities, Web browsing Vulnerabilities and other Cyber Vulnerabilities and Landmines. This course provides Cyber Advice to reduce the risk of internet attacks and clearly explains how to work defensively to safeguard a computer system, how to keep alert, how to prepare for attacks, and what to do when attacks occur.

917 Beginning Micro Assembly Language (3) UC:CSU (RPT 3)
Prerequisite: CS 902, or equivalent experience.
This course will teach the student how to design/develop/implement assembly language programs for PCs. Topics to be covered include hardware architecture and software concepts, program design and debugging, and use of operating system calls. NOTE: CS917 is only offered in the Spring semester.

930 Microsoft Advanced Business Application (4) CSU (RPT 3)
Prerequisite: CS 901 or equivalent experience.
This course teaches the student how to use intermediate and advanced features of the Microsoft Office suite of programs to solve typical business problems. Complex documents will be formatted and printed with Word. Students will learn how to write Excel formulas to deal with business and accounting analysis. Students will learn how to use PowerPoint to enhance their presentation skills. Concepts of relational database management will be taught with Access. Integration of multiple applications to produce a single document will be emphasized. This class will prepare students for the Microsoft Office Users certification tests at a proficient level.

933 Database Design and Programming (3) CSU (RPT 3)
Prerequisite: CS 901, or CS 902, or equivalent experience.
This course explains the concept of a relational database management system. It illustrates how the Microsoft Access database management system may be used in common business applications such as report and screen design, database design, and computer-aided decision making. This course covers advanced Access features including SQL programming.

934 Operating Systems (3) CSU (RPT 3)
Prerequisite: CS 901 or CS 902, or equivalent experience.
This course covers operating system topics in the A+ certification exam and provides students with the technical foundation in current Microsoft operating systems, including operating system installation, configuration, administration, and troubleshooting. This course has a particular focus on Microsoft operating system command-line commands, batch file programming, and Windows scripting. This course is appropriate for computer science majors and/or users who require skills to perform operating system support tasks.
Note: This course is a prerequisite to enter the Microsoft Certified Systems Engineer (MCSE) or the Cisco Certified Network Associate (CCNA) training program.

935 Introduction to Linux+ (3) (RPT 3) UC:CSU
This course gives students a solid foundation in the fundamentals of the Linux operating system which plays a crucial role in academic and corporate computing. In fact, Unix/Linux powers more Internet server and corporate networks than Microsoft. The topics include Linux Overview and Architecture, The Kernel and Shell, File System, Users and Groups Management, Permission and Ownership Management, Services and Processes Management. Students gain system-level experience through problem-solving hands-on lab exercises at the command line and in the graphical user interface.

936 Introduction to Data Structures (3) UC:CSU (RPT 3)
Prerequisite: CS 939 or CS 990, or equivalent experience with C++ or JAVA programming language.
This course covers data structures and advanced programming techniques utilizing JAVA programming language. Data structures will include multidimensional arrays, stacks, queues, dynamically allocated linked lists and trees. *NOTE: CS936 is only offered in the Spring semester.*

937 E-Commerce Essentials (3) CSU (RPT3)
This course provides complete coverage of the key business and technology elements of electronic commerce. It introduces students to both the theory and practice of conducting business over the Internet and World Wide Web. Topics include Technology Infrastructure, Selling & Marketing on the Web, Business-to-Business Strategies, Virtual Communities & Web portals, Web Server Hardware and software, Electronic Commerce Software and Electronic Commerce Security. *NOTE: CS937 is only offered in the Spring semester.*

938 Visual Basic Programming Using VB.net (3) CSU (RPT3)
Prerequisites: CS 902 and familiarity with Windows, or equivalent experience.
Visual Basic has become a popular programming language for Web application, Visual Basic is designed to allow the programmer to develop applications that run under Windows and/or in a Web browser without the complexity generally associated with programming. With very little effort, the programmer can design a screen that holds standard elements such as buttons, check boxes, radio buttons, text boxes, and list boxes. Each of these objects operates as expected, producing a "standard" Windows or Web user interface. Visual Basic is fully object-oriented and compatible with many other languages using the .NET framework. This course incorporates the object-oriented concepts throughout, as well as the syntax and terminology of the language. *NOTE: CS938 is only offered in the Spring semester.*

939 Programming in C (3) UC:CSU (RPT 3)
Prerequisite: CS 902, or equivalent experience.
This course teaches the student to write programs in the C++ language, and introduces the object-oriented programming paradigm. After reviewing basic statement types, students learn to write functions utilizing pass-by values and pass-by references. Structures, classes, and objects are introduced, and students learn to use objects effectively in writing programs. Operator overloading and inheritance also facilitates the use of objects. Pointers, memory management techniques, friend and virtual functions are described. Finally, students examine streams and files as examples of the application of complex object-oriented programming in C++.

948 Advanced Spreadsheet EXCEL for Business Analysis (3) CSU (RPT3)
This course focuses on learning how to solve problems using Microsoft office Excel, although the concepts and tasks presented could apply to a variety of computer applications and programming languages. Excel is widely used in business as a tool for solving problems and supporting decision making. Excel is a powerful tool for the manipulation and analysis of data. Data are usually analyzed to provide support for whether or not to take some course of action- a decision. Using a spreadsheet allows the organization to quickly change various inputs and see what happens to the outputs. The ability to model the potential impacts of decisions before they are made is very valuable in today's complex business environment. Many organizations spend hundreds of hours building models in spreadsheets. The course engages students who have mastered basic computer and applications skills by challenging them to think critically and find effective solutions to realistic business problems.

952 Web Design using FLASH (3) (RPT 3)
This course covers Macromedia's Flash; a state-of -the-art Web information software for creating highly- compact, vector- based content for transmission over the Internet. Topics include Introduction to ActionScript, Event Handlers, objects and Dynamic Data. *NOTE: CS952 is only offered in the Spring semester.*

953 Database Management using Oracle (3) (RPT 3)
This course provides a rich environment for illustrating multi-user and client/server database concepts using Oracle , such as managing concurrent users and sharing database resources, and allows users to develop database applications in a production environment using the database developer utilities. This course addressed database development activities including using SQL commands to create tables and insert, update, delete, and view date values.

957 Introduction to Web Page Design (3) (RPT 3)
Prerequisite: CS 901, or equivalent experience.
This course will take the student through the various technical phases of web site development. Students will learn everything from basic skills such as creating web pages, tables and forms, to more advanced skills such as integrating a database with a web site, and publishing the site on the internet. *Note: This will be the first course in a series of courses in web site development and e-commerce.*

958 Web Page Development Using HTML (4) (RPT 3)
Prerequisite: CS 957, or equivalent experience.
This course teaches students to build web pages using HTML (Hyper Text Markup Language). It will give students hands-on experience in building web pages from scratch. The topics covered include building web pages with tables, image maps, frames, and forms. This course also covers popup windows, validating forms, integrating HTML with JavaScript, one of the popular web programming script languages, and provides an introduction to creating and using XML documents. *NOTE: CS958 is only offered in the Fall semester.*

962 Web Programming Using JavaScript (4) (RPT 3)
Prerequisite: CS 958, or equivalent experience.
This course teaches students to create dynamic Web pages using the popular Web scripting language, JavaScript. This is the course for beginning web programmers with prior knowledge of HTML. JavaScript, a popular scripting language, adds interactive functions to HTML pages and is widely supported in Web browsers and other Web tools. This course also discusses the Document Object Model (DOM) specification published by the World Wide Web Consortium (W3C). This course features hands-on projects, a step-by-step methodology, as well as additional exercises. *NOTE: CS962 is only offered in the Spring semester.*

963 Web Application using Active Server Pages (ASP.net) (3) (RPT 3)
Prerequisite: CS 958, or equivalent experience.
This is the next generation of Active Server Pages! Revolutionizing the way Web applications are developed, ASP.NET is built on Microsoftís .NET framework. Microsoft has added new functionality to ASP to make Web application development easier and tool friendly. This comprehensive course will not only tackle beginning Web Programming and how to create and maintain interactive and dynamic Web applications, it will also explore the Internet as an essential business tool. This course guides the student from beginning Web applications, to object-oriented programming, to using advanced Web form server controls. *NOTE: CS963 is only offered in the Fall semester.*

965 Introduction to Computer Networks (3) (RPT 3) CSU
Prerequisite: CS 934 or equivalent experience.
This course covers network topics in CompTIA Network+ certification exam. It serves as a general introduction for students who need a foundation in computer networking technology, local area networks (LANs) and wide area networks (WANs). It covers network media, topology, network architecture, wired and wireless network standards and protocols. This course is a required prerequisite to enter WLACís Microsoft Certified System Engineer (MCSE) or Computer Security training program.

967 Linux.Apache.MYSQL.Virtual and Cloud Computing (3) (RPT 3)
Prerequisite: CS 935 or equivalent experience.
This is an intermediate to advanced hands-on Linux application course. Course will be using CentOS, discuss Linux concepts, not limited to, directory, file system, permissions, commands application, package installation, network setup, and host security. Hands-on "hot" Linux Open Source Software topics such as: web development with LAMP software stack (Linux,Apache,MySQL & PHP), setup kickstart server for mass systems deployment, server virtualization with Xen hypervisor, then deploy virtual systems on your Xen server utilizing your kickstart setup, and build Eucalyptus Cloud by applying your kickstart and Xen virtualization knowledge.

972 Introduction to Cisco Network Fundamentals (3) (RPT 3)
Prerequisite: CS 965 or equivalent experience.
This course covers topics including networking, network terminology and protocols, network standards, LAN, WAN, the layers of the OSI reference model, cabling, and cabling tools. In addition, this course provides students with their first exposure to Cisco routers, router programming, and routing protocols. Students will be introduced to router startup and setup configuration, the Cisco Internetworking Operating System (IOS), routing protocols, and network management issues. The course utilizes hands-on lab exercises and demonstrations to reinforce network concepts and theories. *Note: This course is equivalent to Ciscoís Semester I & II of the Cisco Network Academy.*

974 Introduction to Cisco Routers (3) (RPT 3)
Prerequisite: CS 972.
This course covers advanced networking topics including LAN switching, VLANs, LAN design, routing protocols, access control lists, and WAN design. In addition, students will learn more advanced Cisco router configuration techniques. The course utilizes hands-on lab exercises and demonstrations to reinforce routing concepts and router configuration. *Note: This course is the final course (equivalence to Ciscoís Semester III & IV) in a series of four courses preparing students to pursue the Cisco Certified Network Associate (CCNA) certification.*

980 Introduction to Computer and Information Security I (3) CSU (RPT 3)
Prerequisite: CS 965, or equivalent experience.
This course introduces the basic concepts of computer security. Students will learn a full range of security concepts and techniques, and apply them to the most popular operating systems and applications used today. Topics include network vulnerabilities, access control, cryptography and public key infrastructure, auditing and intrusion detection, and network and communication security. Lab simulation involves security settings on the Windows 7/Server 2008.
Note: This course, combined with CS 985, is designed to help candidates prepare to complete the CompTIA Security+ certification exam. It is also one of the courses leading to a degree/certificate in Network & Security Management.

981 Administering Computer Networks and Security (3) (RPT 3)
Prerequisites: CS 934 and CS 965 or equivalent experience.
This course covers network operating system topics in Network+ and Microsoft certification exam. This course is intended for those who administer Windows 7/Server under Microsoft Domain environment. It provides students with the knowledge and skills necessary to perform post-installation, day-to-day administration and security tasks. These skills include installation & configuration, domain user accounts & network resources management, network & internet protocols and security settings, auditing, monitoring, troubleshooting and optimization. It also provides students with the knowledge and skills to enter CS982 and advanced network courses.

982 Introduction to Microsoft Server Operating System (3) (RPT 3)
Prerequisites: CS 965, CS 981, or equivalent experience.
This course is intended for those who administer Microsoft Windows 2008 Server, and for those preparing for the Microsoft Certified Systems Engineer (MCSE) Windows 2008 certification examination. The course provides the core foundation for supporting Microsoft Windows 2008 Server. In addition, it provides support professionals with the skills necessary to install, configure, customize, optimize, network integrate and troubleshoot Windows 2008 Server.
Note: This course is one of the required core courses for the WLAC Microsoft Certified Systems Engineer (MCSE) training program.

983 Introduction to Microsoft Network Infrastructure (3) (RPT 3)
Prerequisites: CS 981, CS 982, or equivalent experience.
This course will teach students how to plan a network around features supported by Windows 2008. Students will learn how to configure and support the TCP/IP protocol and network services such as IPSec, DHCP, and DNS, and prepare for certification exam. In addition, it is appropriate for those interested in web server administration and network security.
Note: This course is one of the required core courses for the WLAC Microsoft Certified Systems Engineer (MCSE) training program.

984 Introduction to Windows Active Directory Services (3) (RPT 3)
Prerequisites: CS 981, CS 982, CS 983, or equivalent experience.
This course introduces students to Windows 2008 Server Active Directory Services concepts and prepares students to plan, configure, and administer an Active Directory infrastructure. Students will learn to configure Domain Name System to manage name resolution, schema, and replication. In addition, students will also learn to use Active Directory to centrally manage users, groups, shared folders, and network resources. *Note: This course is one of the required core courses for the WLAC Microsoft Certified Systems Engineer (MCSE) training program.*

985 Introduction to Computer and Information Security II (3) (RPT 3)
Prerequisite: CS 980, or Server OS or equivalent experience.
This course introduces the basic concepts of information assurance. Topics include security baselines, network and application hardening, remote communication security, web and internet security, mail and database security, security policies and procedures, organization and operational security, and computer forensics. Lab simulation involves security settings on the Windows 7/Server 2008. NOTE: CS985 is only offered in the Fall semester. *Note: This course, combined with CS 980, is designed to help candidates prepare to complete the CompTIA Security+ exam, the Microsoft Certified Systems Engineer (MCSE) security specialization exam, and the Certified Information System Security Professional (CISSP) exam. It is one of the courses leading to a degree/certificate in Network & Security Management.*

987 Information Storage Management/Virtual Server (3)
Prerequisite: CS 934 and CS 965 or equivalent experience
This course provides students with knowledge of information storage management technologies needed to work with server virtualization and modern networks. Technologies surveyed include RAID, SAN, NAS, CAS, IP-SAN (iSCSI), backup and recovery, monitoring, business continuity, security, and storage virtualization. Server virtualization technologies will also be introduced. This course is for students who are employed or seeking employment in the IT industry. Students completing this course can take the exam for EMC Associate-Level Certification. *NOTE: CS987 is only offered in the Fall semester.*

988 Installing, Configuring, and Administering Microsoft SQL (3) (RPT 3)
Prerequisite: CS 933 and CS 982, or equivalent experience
This course provides students with the knowledge and skills required to install, configure, administer, and troubleshoot the client-server database management system of Microsoft Structured Query Language (SQL) Server. This course is also extremely appropriate for web site developers and database support personnel. This course is one of the required elective courses for the WLAC Microsoft Certified Systems Engineer (MCSE) training program. *NOTE: CS988 is only offered in the Fall semester.*

989 Implementing/Managing Microsoft Exchange Server (3) (RPT 3)
Prerequisite: CS 982and CS 983, or equivalent experience
This course provides students with the knowledge and skills that are needed to update and support a reliable, secure messaging infrastructure. This infrastructure is used for creating, storing, and sharing information by using Microsoft Exchange Server in a medium-sized to large-sized (250 to 5,000 users) messaging environment.
NOTE: CS989 is only offered in the Spring semester.

990 Object-Oriented Programming in Java (4) UC:CSU (RPT 3)
Prerequisite: CS 902 or equivalent experience
This course is designed to take the student through the various phases of Java programming, from applications and applets to database programming using JDBC. The course will cover Java Foundation Classes (JFC), detailed exposure to Util and Lang packages, and some networking/animation. *NOTE: CS990 is only offered in the Fall semester.*

991 Networking Laboratory (1) (RPT 3) (P/NP)
Prerequisite: CS 972 or equivalent experience.
This is an intermediate to advanced Cisco networking lab that provides hands-on opportunities for students to work with Cisco hardware and Software. Students will work with various Cisco routers and Cisco series switches. Students will have access to lab resources to review and prepare for their Cisco certification exams. Cisco hardware will be accessible 24/7 over the Internet via NDG Remote Lab software.

992 Computer A+ Hardware Laboratory (1) (RPT 3) (P/NP)
This course covers A+ Network + hardware topics and CompTIA certification exam. The rapid expansion of the computer industry has generated a growing need for highly skilled workers to repair, network, and support these increasingly complex computer systems. Employment of computer specialists is expected to increase much faster than average as technology becomes more sophisticated and organizations continue to adopt and integrate these technologies. Computer Repair and Networking offers hands-on training in state-of-the-art computer hardware and software systems. This field requires the specialist to continually learn new skills to keep pace with the rapidly changing industry.

This class will explore basic electronics concepts needed to troubleshoot and repair all aspects of personal computers. In this class we will develop skills such as installation of hard drives, CD drive, interface cards, network cards, monitors, keyboards, peripherals, etc. Operating systems will be installed to insure system operation.

CORRECTIONS

(See Administration of Justice)

2 Correctional Institutions (3) CSU
(Same as Administration of Justice 75)
The student will become aware of cultural diversity during the presentation of he various course topics, such as community relations, race relations and cultural awareness.

3 Field Work I (3) CSU (Same as Administration of Justice 310)
Prerequisites: Corrections 1 and 2.
(Administration of Justice 1 can substitute or Corrections 1.)
Under supervision, students will participate in a correctional facility such as a probation/parole field office, jail, detention center, juvenile camp, juvenile institution, or a similar agency. Students must meet the minimum entry level requirements of the participating agency and will be fingerprinted, take an oath and a TB test. The class meets once a week, and the student will have a volunteer assignment for a minimum of six hours per week with a sponsoring agency.

4 Field Work II (3) CSU
Prerequisites: Corrections 1, 2, and 3.
(Administration of Justice 1 can substitute for Corrections 1.)
Under supervision, students will participate in a correctional facility such as a probation/parole field office, jail, detention center, juvenile camp, juvenile institution, or similar agency. Students must meet the minimum entry-level requirements of the participating agency and will be fingerprinted, take an oath and a TB test. The class meets once a week, and the student will have a volunteer assignment for a minimum of six hours per week with a sponsoring agency.

5 Legal Aspects of Corrections (3) CSU
This course provides students with an awareness of the historical framework, concepts, and precedents that guide correctional practices. Course material will broaden the individual's perspective of the corrections environment, the civil rights of prisoners, and the responsibilities and liability of correctional employees.

310 FIELD WORK I (3) (Same as Corrections 3)
311 FIELD WORK II (3) (Same as Corrections 4)

DANCE SPECIALTIES

All Dance classes require critical thinking to satisfactorily complete the course.

490 Special Topics in Dance (1) CSU (RPT 3)
This course introduces students to the historical and cultural origins and basic dance techniques of folk, ethnic, recreational, or other specialized dance genres. Basic steps and combinations of steps from the particular genre will be utilized to create an understanding of musical phrasing and rhythms utilized in that particular dance form. These combinations eventually will span a full range of motion, and touch upon basic movements that every individual studying dance should know and understand.

DANCE STUDIES

All Dance classes require critical thinking to satisfactorily complete the course.

452 Introduction to Choreography (1) CSU (RPT 3)
This course introduces students to choreography with an emphasis on basic steps and combinations, creating dances and appreciation of dance as a performing art form.

814 Dance Production I (2) CSU (RPT 2)
This course offers instruction in choreographic techniques culminating in a student dance production. Students will be responsible for choreographing and performing a variety of dances. This course is open to all levels.

822 Dance Rehearsals and Performance (1) UC:CSU (RPT 3)
This course is structured rehearsal time culminating in a student dance production. Students participate as dancers and or choreographers.

DANCE TECHNIQUES

All Dance classes require critical thinking to satisfactorily complete the course.
UC Transfer Credit Limit: A maximum of 4 units from the following courses will be acceptable for credit: Dance 225, 228, 229, 470, 666, 668.

*225 Yoga Skills (1) UC:CSU (RPT 3)
An ancient form of movement involving prescribed postures and breathing techniques. Yoga helps to promote strength, flexibility, coordination and balance.

*228 Body Conditioning (1) UC:CSU (RPT 3)
This course combines aerobics with Pilates, dance, yoga and free weights for overall conditioning.

*229 Body Dynamics (1) UC:CSU (RPT 3)
This course combines aerobics with weight training and stretching for overall conditioning. Body mechanics, nutrition and diet information will also be provided.

333 Pilates Skills for Dance (1) CSU (RPT 3)
This course focuses on the functional muscle mechanics that enable an individual to move with balance, coordination, posture, and alignment of the body. Using movements on the floor and creating kinesthetic awareness, students will achieve increased strength and flexibility.

431 Modern Dance (1) UC:CSU (RPT 3)
Instruction and practice in the basic skills and techniques of various modern dance forms.

434 Ballet (1) UC:CSU (RPT 3)
Students will be trained in classical ballet techniques. Correct placement and execution of movements will be emphasized.