LIBR 53. Information Resource Services (2)
Lec-2
Prereq.: LIBR 51
The study of the role of the Library Technician in the Public Service sector of the information industry. Manual and online circulation systems, statistical design and compilation, inventory control, reserve desk maintenance, supervision, personnel problem solving, the information desk, interviewing techniques, shelving, paging, design of information displays, and computer maintenance of records. CSU

LIBR 55A. Cataloging and Classification (3)
Lec-3
Prereq.: LIBR 51
Advise: WDPR 80 or 391A
The study of cataloging and classification of information resources, including books, periodicals, audiovisual, computer software, CD-ROM and Internet materials. The manual process of cataloging materials and the online network systems for copy cataloging. Use of the Dewey and Library of Congress classification schemes. CSU

LIBR 55B. Library Technical Processes (3)
Lec-3
Prereq.: LIBR 51
Advise: WDPR 80 or 391A
A continuation of LIBR 55A. The study of the applied aspects of technical services. Acquisitions; bibliographic verification and control; serials; bindery preparation; Interlibrary Loan; repair and maintenance of resources; library automation; and basic bookkeeping and budgeting techniques. CSU

LIBR 56. Computers in Libraries (3)
Lec-3
Prereq.: LIBR 51
Advise: WDPR 80 or 391A
Hands-on experience with microcomputers, accessing computer databases and microforms as used in information and resource centers. CSU

LIBR 57. Internet Research Strategies (2)
Lec-2 (18 wks)
CR/NCR avail.
The Internet as a research tool. Use Internet access tools to identify appropriate sources for a given topic. Formulate search strategies and retrieve information. Compare information found on the Internet with that found in other library resources. CSU

LIBR 58A. Legal Resources and Libraries (1)
Lec-1
Advise: LIBR 57
The study of the use of legal research tools. The use of printed resources and computerized search techniques is stressed. CSU

LIBR 58B. Medical Resources and Libraries (2)
Lec-2, field trips
Advise: LIBR 57
The study of the use of library medical research tools and medical libraries for the library technician or student entering the health or medical fields. The use of printed, online, CD-ROM and Internet search techniques is stressed. CSU

LIBR 58C. Business Resources and Libraries (2)
Lec-2
Advise: LIBR 57
The study of the use of business research resources and corporate, academic and public business collections. The use of print and computer accessed information is stressed. CSU

LIBR 59. Work Experience in Library Information Technology (3)
Work-10
Prereq.: LIBR 51, 53, 55A, 55B, 56 and consent of instructor
Coreq.: Enrollment in 4 semester units
Repeat: max. 6 units
Supervised practice in local libraries; weekly conference for evaluation and discussion of the experience. CSU

LIBR 90. Topics in Library Technology (0.5 ea.)
Lec-9 hrs (tot.)
CR/NCR only
Prereq.: Completion of at least one course in library information technology or experience working in a library
Repeat: May vary
Lectures, demonstrations, group discussions, and hands-on experiences pertaining to the duties of library/media personnel. Subject varies according to demand and timeliness.

LIBR 90A. MARC Records and the Online Catalog
CSU

Library Orientation
LI O 0. Use of Information Resources (1)
Lec-1
Open to students who have not completed or are not currently enrolled in LIBR 51. Fulfills the SFSU Library Requirement.
Organization of library materials. Use and evaluation of print and electronic library information resources such as catalogs, reference works, indexes, and World Wide Web-based databases. Documentation of retrieved information according to a standard citation format. CSU/UC

Life Science
See Biological Sciences

Mathematics
Announcement of Courses

For “Business Mathematics” see “Business.”

Enrolling in Mathematics Courses
To be eligible to enroll in any mathematics course at or above the level of prealgebra (MATH 835), a student must have passed MATH E or have received a CCSF placement of MATH 840 or higher
In addition, before enrolling in any mathematics course at or above the level of applied geometry (MATH 850) or geometry (MATH 855), a student should first take the Algebra Skills Placement Examination and then consult with a mathematics advisor or counselor.

Finally, before enrolling in a particular course, a student must have satisfied the prerequisites for that course.
CREDIT, NON-DEGREE APPLICABLE COURSES:

MATH E. Basic Mathematics with Problem Solving (2)
Conf-2 CR/NCR only
Not open for credit to students who have achieved a satisfactory score in the City College placement examination in mathematics.
Students who pass MATH E have satisfied the City College graduation requirement in mathematics.
Fundamental concepts and processes of arithmetic, translation of English statements to arithmetic statements, and applications.

MATH S. Elementary Algebra Workshop (2)
Conf-4 CR/NCR only
Coreq.: MATH 840
Intended for Math Bridge Program participants.
Fundamental operations on integers, rational numbers, polynomials and algebraic expressions; linear and quadratic equations; linear inequalities; integer exponents and square roots; graphing; systems of equations; and applications.

MATH T. Applied Geometry Workshop (2)
Conf-3 CR/NCR only
Coreq.: MATH 850
Intended for Math Bridge Program participants.
Standard results of geometry; calculations involving lines, triangles, polygons, circles, and solids; emphasis on applications.

MATH U. Intermediate Algebra Workshop (2)
Conf-3 CR/NCR only
Coreq.: MATH 860
Intended for Math Bridge Program participants.
Polynomials and rational expressions; radicals and rational exponents; complex numbers; equations and inequalities; distance formula, lines, circles, parabolas; introduction to functions and graphs; introduction to exponential and logarithmic expressions; applications.

CREDIT, DEGREE APPLICABLE COURSES:

MATH 835. Prealgebra (3)
Lec-3, conf-2
Prereq.: MATH E or placement into MATH 840 by examination and advising
Recommended for students who need additional preparation before taking MATH 840 or introductory courses in chemistry, physics, engineering technology, economics, or business.
Brief review of basic mathematics; English and metric measurement systems; order of operations, signed numbers, integer exponents, square roots, simple equations and formulas, proportions; length, area, volume, similarity, calculator usage, estimation, and number sense; introduction to probability and statistics; applications.

MATH 840. Elementary Algebra (3)
Lec-5
Prereq.: MATH E or placement into MATH 840 by examination and advising
Fundamental operations on integers, rational numbers, polynomials and algebraic expressions; linear and quadratic equations; linear inequalities; integer exponents and square roots; graphing; systems of equations; and applications.

MATH 850. Applied Geometry (2)
Lec-3
Prereq.: MATH 840 or placement into MATH 850 by examination and advising
Not open for credit to students who have passed MATH 855.
Standard results of geometry; calculations involving lines, triangles, polygons, circles, and solids; emphasis on applications.
The Mathematics Department offers two geometry courses: (1) MATH 850 emphasizes problem solving and applications, and (2) MATH 855 emphasizes proofs and the logical structure of geometry but includes problem solving and applications.

Students intending to study calculus should take MATH 855.

MATH 855. Geometry (3)
Lec-5
Prereq.: MATH 840 or placement into MATH 855 by examination and advising
Lines, triangles, polygons, circles, geometric constructions, space geometry. Emphasis on proving theorems and on the logical structure of geometry.

MATH 860. Intermediate Algebra (4)
Lec-4, conf-1
Prereq.: MATH 840 and MATH 850 or 855, or placement into MATH 860 by examination and advising
Polynomials and rational expressions; radicals and rational exponents; complex numbers; equations and inequalities; distance formula, lines, circles, parabolas; introduction to functions and graphs; introduction to exponential and logarithmic expressions; applications.

MATH 70. Mathematics for Liberal Arts Students (3)
Lec-3
Prereq.: MATH 860 and MATH 850 or 855, or placement into MATH 70 by examination and advising
Recommended that students be eligible for ENGL 90 or ESL 72.
Not open for credit to students who have passed MATH 110A or MATH 100A.
Concepts of mathematics for students with nontechnical goals. Range of topics from various branches of mathematics. The nature of mathematics. The role of mathematics in modern society. CSU

MATH 75. Mathematical Analysis for Business (3)
Lec-3
Prereq.: MATH 92 or 860
Students completing MATH 860 are encouraged to complete MATH 90 before taking MATH 75.
Sets, lines, parabolas, functions and graphs, mathematics of finance, introduction to differential and integral calculus of functions of one variable, with applications to business and economics. CSU/UC
MATH 79. Using a Graphics Calculator (2)  
Lec-1, conf-1  
CR/NCR only  
Prereq.: MATH 860  
Designed to enable students to use a hand-held programmable graphics calculator in their mathematics, engineering, and science courses.  
Using menus, other calculator features, and reference manuals.  
Evaluating expressions, approximating solutions to equations,  
analyzing graphs of functions, and operating with lists and matrices. CSU

MATH 80. Probability and Statistics (4)  
Lec-4  
Prereq.: MATH 92 or 860  

MATH 90. Advanced Algebra (3)  
Lec-3  
Prereq.: MATH 860 and MATH 850 or 855 or placement into MATH 90 by examination and advising  
Not open for credit to students who have passed MATH 92.  
Functions and relations, conic sections, systems of equations and inequalities, nonlinear inequalities, inverse functions, exponential and logarithmic functions, matrices and determinants, zeros of polynomials, binomial theorem, mathematical induction, and arithmetic and geometric sequences and series. CSU

MATH 92. College Algebra (5)  
Lec-5  
Prereq.: MATH 840 and MATH 850 or 855; or placement into MATH 92 by examination and advising  
Recommended for students with strong mathematics capabilities.  
Not open for credit to students who have passed MATH 90.  
Topics comprising MATH 860 and MATH 90: fundamental operations, equations and inequalities, functions, inverse functions, graphing and analytic geometry, conic sections, complex numbers, zeros of polynomials, exponential and logarithmic functions, systems of equations, matrices and determinants, binomial theorem, sequences, geometric series, mathematical induction. CSU

MATH 95. Trigonometry (3)  
Lec-3  
Prereq.: MATH 92 or 860; and MATH 855 or 850  
Students completing MATH 860 are encouraged to complete MATH 90 before taking MATH 95.  
Circular (trigonometric) functions, identities, and equations;  
graphs of circular functions, arccfunctions (inverse trigonometric functions); triangles; complex numbers. CSU/CAN: MATH 8

MATH 97. Precalculus (5)  
Lec-5  
Prereq.: MATH 95; MATH 90 or 92; and MATH 850 or 855  
An intensive, comprehensive review for students who have successfully completed trigonometry and advanced algebra but need review before beginning a calculus course.  
Fundamental operations, equations and inequalities, functions, inverse functions, graphing and analytic geometry, conic sections, complex numbers, zeros of polynomials, exponential and logarithmic functions, trigonometric functions, trigonometric identities and equations, graphs of trigonometric functions, solutions of triangles, systems of equations, matrices and determinants, binomial theorem, sequences, series, mathematical induction. CSU/UC/CAN: MATH 16

The Mathematics Department offers two calculus sequences: (1) MATH 100A-100B is intended for students majoring in business, technology, social sciences, or life sciences and (2) MATH 110A-110B-110C is intended for students majoring in mathematics, computer science, engineering, or physical sciences.

It is each student's responsibility to determine which calculus sequence is appropriate for his or her academic program.

MATH 100A. Calculus (3)  
Lec-3  
Prereq.: MATH 95; MATH 90 or 92; and MATH 850 or 855  
Lines, algebraic functions, exponential functions, logarithmic functions, limits, derivatives, and integrals, with applications. CSU/UC/CAN: MATH 30; MATH 100A-100B: MATH SEQ D

MATH 100B. Calculus (3)  
Lec-3  
Prereq.: MATH 100A  
Calculus of trigonometric functions, techniques of integration, Taylor polynomials, multivariable calculus, and differential equations, with applications. CSU/UC/CAN: MATH 32; MATH 100A-100B: MATH SEQ D  
The distinction between the two calculus sequences is explained in the paragraphs immediately preceding the course description for MATH 100A.

MATH 110A. Calculus I (4)  
Lec-4, conf-1  
Prereq.: MATH 95; MATH 90 or 92; and MATH 850 or 855  
Functions and graphs, geometric transformations, conic sections; limits, continuity, differentiation, and integration of algebraic and circular functions, with applications. CSU/UC; MATH 110A-110B-110C: CAN: MATH SEQ C

MATH 110B. Calculus II (4)  
Lec-4, conf-1  
Prereq.: MATH 110A  
Differentiability of inverse functions; transcendental functions; indeterminate forms; integration techniques, numerical integration, improper integrals; plane vectors, parametrized curves, polar coordinates; polynomial approximation; sequences and series, power series. CSU/UC; MATH 110A-110B-110C: CAN: MATH SEQ C
Mathematics

MATH 110C. Calculus III (4)
Lec-4, conf-1
Prereq.: MATH 110B
Space vectors, vector functions; partial differentiation; scalar and vector fields, vector differential operators; multiple integration. Jacobians; line integrals, path independence, and scalar potentials; surface integrals; theorems of Green, Stokes, and Gauss. CSU/UC; MATH 110A-110B-110C: CAN: MATH SEQ C

MATH 115. Discrete Mathematics (3)
Lec-3
Prereq.: MATH 110B or 100B
Set theory, logic, relations and functions, mathematical induction and recursion, combinators, discrete probability, trees and graphs, analysis of algorithms, algebraic structures. Emphasis on topics of interest to computer science students. CSU/UC

MATH 120. Linear Algebra (3)
Lec-3
Prereq.: MATH 110C
Systems of linear equations, matrix algebra, determinants, vector spaces, linear transformations, eigenvalues and eigenvectors. CSU/UC/CAN: MATH 26

MATH 125. Differential Equations (3)
Lec-3
Prereq.: MATH 110C

MATH 130. Linear Algebra and Differential Equations (5)
Lec-5
Prereq.: MATH 110C

MATH 199. Special Topics in Mathematics (3)
Lec-3
Prereq.: Varies with course content
Repeat: max. 9 units
The content of this course varies. CSU/UC

Music

Announcement of Courses

All music students are encouraged to enroll in at least one of the Music Department performing groups each semester. Knowledge of music fundamentals and the ability to read music are recommended for many music theory, instrumental and vocal training, and performance courses. Where a music course has a sequential prerequisite, check with the Department Head for skill demonstration equal to the prerequisite.

CREDIT, DEGREE APPLICABLE COURSES

Music Theory

The MUS 2A-2B-2C-2D series is a four-semester comprehensive theory program for music students which will transfer as fulfillment of the first two years of lower-division music theory requirements. The MUS 1A-1B, 3A-3B series is a two-semester ear-training and harmony program for music students which will transfer as fulfillment of one year of lower-division music theory requirements.

MUS 1A-1B. Musicianship (2-2)
Lec-3, lab-1, field trips
CR/NCR avail.
Advise: MUS 1A: MUS 4 or demonstration of exit skills
Repeat: max. 4 units ea.
Development of skills in sight reading, ear training, and notation through the study of scales, intervals, and simple songs. CSU/UC

MUS 2A-2B-2C-2D. Comprehensive Music Theory (5-5-5-5)
Lec-5, lab-1, field trips
CR/NCR avail.
Advise: MUS 4 or demonstration of exit skills
May be taken in any sequence
A four-semester comprehensive approach to the chronological study of music theory. Daily sessions involving modal, contrapuntal, or harmonic studies and exercises, ear training, and musical analysis, with the goal of integrating these studies in reference to historical periods. Extensive written assignments required. CSU/UC

MUS 2A-2B. Music in the style of the medieval, renaissance, and baroque eras.
MUS 2C-2D. Music in the style of the classic, romantic, and modern eras.

MUS 3A-3B. Harmony (3-3)
Lec-3, lab-1, field trips
CR/NCR avail.
Advise: MUS 3A: MUS 4 or demonstration of exit skills
A music-writing course based on traditional harmony, including linear and vertical analysis. CSU/UC

MUS 4. Music Fundamentals (2)
Lec-3, lab-1, field trips
CR/NCR avail.
Repeat: max. 4 units
An introduction to basic skills in music, including staff notation, rhythmic notation, intervals, scales, chord construction, sight reading, and ear training. CSU/UC

Military Science

The University of San Francisco is part of the Consortium of San Francisco Colleges and Universities. Students attending a member of the consortium may enroll in a Military Science course at the University of San Francisco under that agreement at no cost. Full credit will be given by City College of San Francisco to fully enrolled students. Specific inquiries about this program should be directed to the Professor of Military Science, University of San Francisco.

Multimedia Studies

See Interdisciplinary Studies
MUS 5A-5B. Composition (3-3)
Lec-3, field trips CR/NCR avail.
*Advise: MUS 5A: MUS 3A or demonstration of exit skills
Study of the principles of musical composition through analysis and creative writing. Pieces may be composed for piano and/or small instrumental and/or vocal ensembles. CSU/UC

Instrumental and Vocal Training

MUS 6A. Elementary Classical Guitar (1)
Lec-3, field trips CR/NCR avail.
*Advise: MUS 4 or demonstration of exit skills
*Repeat: max. 2 units
No prior experience with the guitar necessary. The student must provide a guitar.
An introduction to the music and technique of the acoustical guitar. A foundation with emphasis on classical techniques. Some review of musical theory. CSU/UC

MUS 6B. Intermediate Classical Guitar (1)
Lec-3, field trips CR/NCR avail.
*Advise: MUS 6A or demonstration of exit skills
*Repeat: max. 4 units
A continuation of MUS 6A. Further study of acoustical guitar theory, technique, and repertoire with emphasis on classical guitar. CSU/UC

MUSIC 7 Series
(The letter after the 7 indicates the instrument, not the sequence.)
The Music Department recommends that students enrolling in any of the courses in the MUSIC 7 series enroll concurrently in appropriate music performance courses such as concert band (MUS 16), stage band (MUS 46), pep band (MUS 47), orchestra (MUS 15), string ensemble (MUS 20), brass ensemble (MUS 18), or woodwind ensemble (MUS 17).

MUS 7C. Cello (1)
Lec-3, field trips CR/NCR avail.
*Repeat: max. 4 units
An exploration of the elements of cello playing, including bowing concepts and techniques, tone production, and left-hand techniques. Open to beginners as well as to others at any level of proficiency. CSU/UC

MUS 7P. Percussion (1)
Lec-3, field trips CR/NCR avail.
*Repeat: max. 4 units
The study and technique of playing various percussion instruments. CSU/UC

MUS 7T. Brass (1)
Lec-3, field trips CR/NCR avail.
*Repeat: max. 4 units
Basic brass techniques for beginning, intermediate, or advanced players. Embouchure problems, breathing methods, and tone production. CSU/UC

MUS 7V. Violin and Viola (1)
Lec-3, field trips CR/NCR avail.
*Advise: MUS 4
*Repeat: max. 4 units
Violin or viola training for beginning, intermediate, and advanced players. CSU/UC

MUS 7W. Woodwind (1)
Lec-3, field trips CR/NCR avail.
*Repeat: max. 4 units
The study and techniques of playing various woodwind instruments. CSU/UC

MUS 8A-8B. Jazz and Other Popular Piano Styles (1-1)
Lec-3, field trips CR/NCR avail.
*Advise: MUS 9A or demonstration of exit skills
A study of basic jazz, rock, gospel, blues, and folk piano techniques. CSU/UC

MUS 9A. Beginning Piano (2)
Lec-3, lab-1, field trips CR/NCR avail.
*Repeat: max. 4 units
Basic piano techniques for the beginner. Emphasis on elementary theory and music reading. CSU/UC

MUS 9B. Intermediate Piano (1)
Lec-3, field trips CR/NCR avail.
*Advise: MUS 9A or demonstration of exit skills
*Repeat: max. 4 units
A continuation of piano training for beginning, intermediate, and advanced pianists. CSU/UC

MUS 9C. Keyboard Harmony (1)
Lec-3, field trips CR/NCR avail.
*Advise: MUS 9A or demonstration of exit skills
*Repeat: max. 4 units
The development of harmonic keyboard skills through the study and practice of chord structures, progressions, and sight reading techniques. CSU/UC

Music 10 Series
(The Music Department recommends that students enrolling in the MUSIC 10 series should enroll concurrently in a choral-performing group (MUS 12 or 14) or Music Theatre Workshop (MUS 44).

MUS 10A. Beginning Voice (1)
Lec-3, field trips CR/NCR avail.
*Repeat: max. 2 units
Study of the basic techniques of tone production, breathing, and related skills in interpreting vocal music of various periods and styles, including popular. CSU/UC

MUS 10B. Intermediate Voice (1)
Lec-3, field trips CR/NCR avail.
*Advise: MUS 10A or demonstration of exit skills
*Repeat: max. 4 units
A continuation of vocal training for intermediate and advanced singers. Emphasis on the development of vocal techniques and the interpretation of songs of various styles and periods. CSU/UC
Performance Courses

MUS 11. Guitar Workshop (1)
Lec-3, field trips CR/NCR avail.
Advis: MUS 6A or demonstration of exit skills
Repeat: max. 4 units
An opportunity for guitarists to learn and to play ensemble
music from all stylistic periods—Renaissance, Baroque, Cla-
sical, Romantic, and especially twentieth century. An oppor-
tunity to play in guitar duos, trios, quartets, and, when possible,
with other instruments. CSU/UC

MUS 12. Choir (1)
Lec-3, field trips CR/NCR avail.
Repeat: max. 4 units
Study and performance of fine choral music, sacred and
secular, from all periods of music history. Public performance
both on-campus and off-campus. CSU/UC

MUS 13A. Jazz-Rock Improvisational Workshop (2)
Lec-3, field trips CR/NCR avail.
Repeat: max. 8 units
Study of a variety of jazz, rock, and blues styles. Emphasis on
learning the techniques of improvisation. CSU/UC

MUS 13B. Jazz-Rock Arranging and Composition
Workshop (2)
Lec-3, field trips CR/NCR avail.
Advis: MUS 3A or demonstration of exit skills
Repeat: max. 8 units
Study of a variety of jazz, rock, and blues styles. Emphasis on
learning the techniques of arranging and composing. CSU/UC

MUS 14. Chorale (1)
Lec-3, field trips CR/NCR avail.
Repeat: max. 4 units
Study and performance of choral music for small ensembles.
Public performances both on and off campus. CSU/UC

MUS 15. Orchestra (1)
Lec-3, field trips CR/NCR avail.
Repeat: max. 4 units
Opportunity for string, woodwind, brass, and percussion
players to rehearse and perform works selected from the
standard repertory from the baroque through the present.
CSU/UC

MUS 16. Concert Band (1)
Lec-3, field trips CR/NCR avail.
Repeat: max. 4 units
Study and performance of concert band and wind ensemble lit-
erature of all stylistic periods. CSU/UC

MUS 17. Woodwind Ensemble (1)
Lec-3, field trips CR/NCR avail.
Repeat: max. 4 units
Study and performance of woodwind ensemble techniques of
all stylistic periods. CSU/UC

MUS 18. Brass Ensemble (1)
Lec-3, field trips CR/NCR avail.
Repeat: max. 4 units
Study and performance of brass ensemble techniques of all
stylistic periods. CSU/UC

MUS 19. Piano Ensemble and Repertoire (1)
Lec-3, field trips CR/NCR avail.
Repeat: max. 4 units
Performance of four-hand, two-piano, and solo literature from
all stylistic periods. Study of accompanying skills and use of
these whenever possible in performances. Monthly public
recitals. CSU/UC

MUS 20. String Ensemble (1)
Lec-3, field trips CR/NCR avail.
Repeat: max. 4 units
An exploration of techniques and ensemble literature appropri-
ate for intermediate and advanced violinists, violoncellists,
and string bass players. Performances may be scheduled. CSU/UC

Music Surveys

MUS 21. Traditional African Music (3)
Lec-3, field trips CR/NCR avail.
A survey of the function of traditional music in Africa and how
it is organized as an integral part of everyday activity.
Emphasis on practical application. CSU/UC

MUS 22A-22B. History of Music in Western
Culture (3-3-3)
Lec-3, lab-1, field trips CR/NCR avail.
May be taken in any sequence
An intensive critical survey of musical styles in Western culture
studied chronologically. Emphasis on works and composers
representative of differing styles and periods and on various
musical contexts from which they emerged. CSU/UC

MUS 22A. Medieval and Renaissance music: early Christian
chant to 1600.
MUS 22B. Baroque and Classical music: the seventeenth
and eighteenth centuries.
MUS 22C. Nineteenth Century Romanticism: Beethoven to
Mahler.

For music of the twentieth century, see MUS 28.

MUS 23. Jazz History, Musical Traditions of the
African American (3)
Lec-3, lab-1, field trips CR/NCR avail.
Lectures, discussions, assigned reading, and listening designed
to explore the musical heritage of the African American, includ-
ing spirituals, work songs, blues, jazz, gospel, opera, and
symphony. Interaction of these with traditional American and
European music. CSU/UC

MUS 24. Music of East Asia (3)
Lec-3, lab-1, field trips CR/NCR avail.
A cross-cultural, comparative survey of both historical and
recent developments in the music of China, Japan, and Korea,
including the relationship of East Asian music to other aspects
of East Asian cultures—philosophy, religion, theatre, dance.
CSU/UC
MUS 25. Music of Latin America and the Caribbean (3)
Lec-3, lab-1, field trips CR/NCR avail.
Survey of Latin American and Caribbean music. Music as a form of communication and as a social and cultural force in the Americas. CSU/UC

MUS 26. Music in American Culture (3)
Lec-3, lab-1, field trips CR/NCR avail.
A survey of music generated by America's diverse populations including Latino, African American, Hawaiian, Native American, Cajun and Puerto Rican. CSU/UC

MUS 27A. Music Appreciation (3)
Lec-3, lab-1, field trips CR/NCR avail.
The development of increased musical awareness in the listener. A study of musical elements, forms, and styles through listening, lectures, readings, and discussions. CSU/UC

MUS 27B. Musical Awareness (3)
Lec-3, lab-1, field trips CR/NCR avail.
*MUS 27A is not prerequisite for MUS 27B
Repeat: max. 9 units
Detailed study of selected larger musical forms such as the opera, symphony, concerto, and chamber works. Assigned listening and readings. CSU/UC

MUS 27C. Music and Queer Identity (3)
Lec-3, field trips CR/NCR avail.
Examination of the question of how music encodes "queerness" by focusing on various musical styles and musical performers that have become significant for the lesbian, gay and bisexual community. CSU

MUS 28. Contemporary Music (3)
Lec-3, lab-1, field trips CR/NCR avail.
Study of the music and the composers of the twentieth century through analysis of their means and methods, recordings illustrating the types of music under discussion, and creative projects involving graphic scores, tapes, and new instruments. CSU/UC

MUS 29. Electronic Music (3)
Lec-3, lab-1, field trips CR/NCR avail.
A practical study of the means by which electronic music is created, its compositional techniques, and the uses to which it may be put. CSU/UC

MUS 30. Electronic Music Laboratory (2)
Lec-3, lab-3, field trips CR/NCR avail.
Prereq.: MUS 29 or IDST 120
Repeat: max. 8 units
The content of this course varies. Students may re-enroll without repeating subject matter.
Further practical study of the technical aspects of electronic music, including compositional techniques of synthesis, multi-track recording and digital sequencing. CSU/UC

MUS 31. Digital Music Studio (3)
Lec-3, lab-2, field trips CR/NCR avail.
Prereq.: MUS 30A
Repeat: max. 6 units
Practical study of the digital music studio, including the functions of hardware and software tools for composition, sequencing, notation, and digital audio recording. Creation and editing digital music files and exploration of current practical application of the medium. CSU

Other Music Performance Courses

MUS 41. African Drumming Ensemble (1)
Lec-3, field trips CR/NCR avail.
Repeat: max. 4 units
African drumming studies and performance of music integral to everyday life in Africa. A review of the function of traditional music in Africa. CSU/UC

MUS 42. Jazz, Pop, Gospel Choir (1)
Lec-3, field trips CR/NCR avail.
Repeat: max. 4 units
Study and performance of popular, gospel, and jazz and swing choir arrangements with rhythm section. CSU/UC

MUS 43. Labor Heritage Chorus (1)
Lec-3, field trips CR/NCR avail.
Repeat: max. 4 units
Study and performance of labor songs from various periods in American history. Songs that reflect workers of diverse cultures, such as Native American chants, folk and labor ballads, field hollers, Black cowboy songs, Chicano farm and border songs, labor Motown, Asian American work songs and working women's rap. CSU
MUS 43 = LABR 93C

MUS 44. Music Theatre Workshop (3)
Lec-6, field trips CR/NCR avail.
Repeat: max. 9 units
An opportunity for students interested in musical theatre to study, rehearse, and participate in performances of musical works for the stage. Equal emphasis given to the musical and dramatic elements involved in such productions. For staged, public performances, roles may be assigned subject to audition. CSU/UC

MUS 45. Early Music Performance Workshop (2)
Lec-3, lab-1, field trips CR/NCR avail.
Repeat: max. 8 units
An investigation of musical performance styles from the late Middle Ages through the Baroque. Students work and perform in an area of their choice. CSU/UC

MUS 46. Stage Band (1)
Lec-3, field trips CR/NCR avail.
Repeat: max. 4 units
Reading, preparation, and playing of music arranged for dance bands, with emphasis on jazz. CSU/UC

MUS 47. Pep Band (1)
Lec-3, field trips CR/NCR avail.
Repeat: max. 4 units
Rehearsal band for music of all popular styles. Performances at various athletic events. CSU
MUS 50. Music Rehearsal and Performance (1)  
Lec-3  
CR/NCR avail.  
Repeat: max. 4 units  
An opportunity for students who are enrolled in music courses requiring extra performance and rehearsal hours to receive credit for their work. CSU/UC

Nursing, Registered (RN)  
Announcement of Curriculum

Degree Curriculum  
The Associate in Science curriculum in Nursing is accredited by the California Board of Registered Nursing (BRN). Students who complete the course of study in accordance with City College requirements are eligible to take the National Council Licensure Examination of Registered Nurses (NCLEX-RN). Those who pass the NCLEX-RN are qualified for entry-level positions of R.N. in health facilities and agencies.

NOTE: The licensing process for becoming a registered nurse in California is handled by the BRN. The BRN requires disclosure of all misdemeanor and felony convictions for all license applicants and disclosure of all disciplinary actions taken against a license applicant who already has a practical nurse, vocational nurse or other professional license. Fingerprinting is also required. Persons considering enrollment in the Nursing Department may contact the BRN in advance of considering the Nursing program to learn whether a previous conviction or disciplinary record will prevent licensing to practice nursing.

Course of Study. The Nursing course of study includes instruction in applied nursing science and related life sciences, and clinical experience in San Francisco Bay Area cooperating clinical settings. The required course of study for Nursing includes courses that may also satisfy certain general education requirements.

Associate in Science Degree. The Nursing curriculum, supplemented by general education courses, is designed so that students may satisfy the requirements for graduation from City College with the degree of Associate in Science. It is recommended that all students who wish to enroll in the Nursing Program take the CCSF placement tests before enrolling.

Enrollment. Enrollment in the Nursing Program follows the City College policy of equal educational opportunity. Because of facility and staffing limitations, as well as health and safety requirements, not all students who wish to enroll in the Nursing Program can be accommodated. Selection from among students who are eligible to enroll is made each semester for the following program cycle.

Requests for information regarding enrollment should be addressed to:  
Enrollment Committee  
Nursing Department  
City College of San Francisco  
50 Phelan Avenue  
San Francisco, CA 94112

Dates for Filing Required Enrollment Forms. For the fall semester, enrollment forms must be received by the Nursing Department no later than April 15 and for the spring semester, no later than October 15. If either date falls on a weekend or a holiday, the receipt date is moved to the next calendar day.

Expenses. Students should expect to incur expenses of approximately $2500 covering the two years of nursing curriculum. This does not include expenses that may relate to non-nursing classes. The expenses related to nursing classes include the cost of required books, uniforms, and individual equipment.

Enrollment to the Program. Because of facilities and staff limitations, 50 new students may be enrolled in the Nursing Program each semester. To be considered for enrollment, students must satisfy certain academic prerequisites as well as health and safety prerequisites. The following is a summary of the requirements for enrollment in the Nursing Program/courses. Please contact the Nursing Department directly for an enrollment form and information package which includes more complete information.

1. File with the Office of Admissions and Records a completed application for admission to City College. No person may attend nursing classes unless he/she is properly admitted to the College.
2. File a completed enrollment form for the Nursing Program for the fall semester between November 15 and February 15 and for the spring semester, between May 15 and August 15 with the Nursing Department.
3. Complete the following courses within 7 years prior to enrollment with a C or higher in each class:
   Anatomy 25  
   Physiology 1 or 12  
   Microbiology 12
4. Complete the following courses prior to enrollment with credit or a grade of C or higher:
   English 1A, 94, 96, or ESL 82  
   Math E or BSMA G, H or J
   Students may satisfy the above course prerequisites at other institutions, but the courses and grades must be verified prior to consideration for enrollment.
5. Submit official transcripts to verify the completion of prerequisite courses to the Office of Admissions and Records and to the Nursing Department.
6. Health and safety requirements. Nursing courses require students to practice nursing skills in the classroom and in cooperating clinical settings. For health and safety reasons, enrollees must demonstrate through a recent, complete medical examination that they are able to participate in the program, have been tested for tuberculosis, and that they have received the following immunizations: rubella, rubella, varicella titers, and hepatitis B. Enrollees must also provide verification of cardiopulmonary resuscitation basic life support, level C certification. Verification of these requirements must be received by the Nursing Department prior to the first day of class.

If the number of prospective enrollees who have met all the program prerequisites exceeds the number of available spaces in the program, the new enrollees will be selected through nonevaluative measures.
Admission of LVNs, psychiatric technicians, transfer nursing students and RN requirements for BRN of California

1. LVNs and psychiatric technicians with current, valid California licenses who have been accepted into the Nursing Program through the usual enrollment process may be given advance placement based on space availability. Please contact the Department Chairperson for further information.

2. LVN nurses who wish to take the 30-unit provisional program must have a current, valid California LVN license and must have completed Microbiology 12 and Physiology 1 or 12 with a grade of C or higher. Students who qualify for this option should make an appointment with the Nursing Department Chairperson for additional information. Advanced placement is on a space available basis only.

3. Transfer students from other accredited RN nursing programs are considered for enrollment in the Nursing Program. Acceptance is based on equivalent professional nursing education, general education courses and space availability. Transfer students must meet the same enrollment requirements as all students entering the program.

4. RNs who need specific courses required by the BRN for the NCLEX-RN examination should contact the Department Chairperson for additional information. Enrollment is on a space available basis only.

Credit by Examination. All nursing courses are challengeable. Consideration for challenge will be based on previous education and/or experience on an individual basis.

Academic Probation and Dismissal. The failure of a nursing student to satisfactorily demonstrate mastery of required knowledge, skills, or abilities can jeopardize the safety or welfare of others. Depending on the nature of the performance that demonstrates the lack of necessary knowledge, skills, or abilities, students may be placed on academic probation or may be subject to academic dismissal prior to the end of the semester.

All City College students, including Nursing students, are subject to the Rules of Student Conduct, and must confrom their behavior to appropriate standards, both during theory classes and during clinical experiences at cooperating clinical settings.

Courses Required for the Award of Achievement in Nursing

A. NURSING COURSES

First Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 50 Fund of Nurs</td>
<td>6</td>
</tr>
<tr>
<td>NURS 50A Pharmacology in Nurs I</td>
<td>2</td>
</tr>
<tr>
<td>NURS 50L Nurs Skills Lab</td>
<td>1</td>
</tr>
<tr>
<td>NURS 90 Nurs Lab</td>
<td>0</td>
</tr>
<tr>
<td>HTHL 10 Aging</td>
<td>3</td>
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</table>

Second Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>NURS 50B Part II</td>
<td>2</td>
</tr>
<tr>
<td>NURS 51 Basic Med Surgical Nursing</td>
<td>6</td>
</tr>
<tr>
<td>NURS 90 Nurs Lab</td>
<td>0</td>
</tr>
</tbody>
</table>

Third Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 53 Maternal and Newborn Care</td>
<td>6</td>
</tr>
<tr>
<td>NURS 55 Psychosocial Nurs</td>
<td>6</td>
</tr>
<tr>
<td>NURS 90 Nurs Lab</td>
<td>0</td>
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</tbody>
</table>

Fourth Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 54 Nurs of Children</td>
<td>6</td>
</tr>
<tr>
<td>NURS 56 Adv Med &amp; Surg Nurs</td>
<td>6</td>
</tr>
<tr>
<td>NURS 58 Trends &amp; Issues in Nurs</td>
<td>1</td>
</tr>
<tr>
<td>NURS 90 Nurs Lab</td>
<td>0</td>
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</tbody>
</table>

B. GENERAL EDUCATION COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>*ANAT 25 Gen Human Anat</td>
<td>4</td>
</tr>
<tr>
<td>*PHYS 1 or 12 Human Physio</td>
<td>4</td>
</tr>
<tr>
<td>*M B 12 Intro to Microbiology</td>
<td>4</td>
</tr>
<tr>
<td>*ENGL 1A, 94, or 96, or ESL 82 Read &amp; Comp, Inter or Adv. Inter Reading and Comp</td>
<td>3</td>
</tr>
<tr>
<td>*PSYC 1 Gen Psychology</td>
<td>3</td>
</tr>
<tr>
<td>*SOC 1 Intro Sociology</td>
<td>3</td>
</tr>
<tr>
<td>*SPCH 1A, 4, 11, 12, or ESL 79 Elem of Publ</td>
<td>3</td>
</tr>
<tr>
<td>Speak or Group Discuss</td>
<td>3</td>
</tr>
</tbody>
</table>

*These courses meet the California Board of Registered Nursing requirement for licensure and must be completed prior to taking the R.N. Licensure Examination (NCLEX-RN).

In addition to the above, students must also complete General Education courses in Humanities (Area E), U.S. History and Government (Area F), Physical Skills and Health Knowledge (Area G), and Ethnic/Women's/Gay and Lesbian Studies (Area H).

Please see the course descriptions for Nursing and general education courses in other parts of this catalog.

Board of Registered Nursing. All students should familiarize themselves with all requirements for taking the NCLEX-RN. Completion of the Nursing Department curriculum does not guarantee passage of the NCLEX-RN or eligibility for a California State RN license.

Nursing, Registered (RN)

Announcement of Courses

CREDIT, DEGREE APPLICABLE COURSES:

NURS 50. Fundamentals of Nursing (6)
Lec-3, lab-7, conf-2, field trips
Prereq.: Admission to the curriculum in Nursing
Introduction to the principles of nursing common to the care of all patients, with instruction and practice in the nursing laboratory at the College and in the cooperating hospitals.
Emphasis on the meaning of health and disease and interpersonal relationships. CSU
NURS 50A. Pharmacology in Nursing Part I (2)
Lec-2
Coreq.: NURS 50
Provides an overview of drug classification and then a focus on specific drug therapies related to the integumentary, endocrine, and central nervous systems, sensory organ inflammation, immunity and cancer. Emphasis on nursing implications of drugs, i.e. administration, pharmacologic effects, clinical uses and adverse effects. CSU

NURS 50B. Pharmacology in Nursing Part II (2)
Lec-2
Coreq.: NURS 51
Focuses on specific drugs used in the management of cardiovascular, respiratory, gastrointestinal, neurological, urinary, reproductive, psychiatric and peripheral nervous system disorder. Emphasis on nursing implications of drugs, i.e. administration, pharmacologic effects, clinical uses, and adverse effects. CSU

NURS 50L. Nursing Skills Laboratory (1)
Lab-3  CR/NCR only
Coreq.: NURS 50
Assists in the development of psychomotor and cognitive skills involved in the performance of selected nursing procedures. Students work independently and/or in small groups. CSU

NURS 51. Basic Medical-Surgical Nursing (6)
Lec-3, lab-7, conf-2
Prereq.: NURS 50
Designed to acquaint students with the basic principles of the causes of disease; the body's response to disease; and the diagnosis, treatment, and prevention of disease. Emphasis on nursing skills essential to meeting the physical, psychological, and social needs of patients in the hospital and elsewhere in the community. Health and social aspects of nursing and basic principles of diet therapy, pharmacology, and pathology. Students care for selected medical and surgical patients in the cooperating hospitals. CSU

NURS 53. Maternal and Newborn Care (6)
Lec-6, lab-16, conf-2, field trips (8 wks)
Prereq.: NURS 51
NURS 53 and 55 are half-semester courses required in the third semester of students enrolled in the curriculum in Nursing. The sequence in which students will take these courses will be determined by the Nursing Department.
Principles of and practices in maternal health and the care of the newborn. Covers the complete maternity cycle and the growth and development of the newborn from the embryonic stage to neonatal life. Nursing experience in the cooperating hospitals augmented by observations in clinics and community agencies contributing to the welfare of mothers and children. CSU

NURS 54. Nursing of Children (6)
Lec-6, lab-16, conf-2 (8 wks)
Prereq.: NURS 53 and 55
NURS 54 and 56 are half-semester courses required in the fourth semester of students enrolled in the curriculum in Nursing. The sequence in which students will take these courses will be determined by the Nursing Department.
The child as an individual and as a member of a family and the community. Physical, emotional, and social growth and development; and the causes, treatment, and prevention of childhood diseases. Emphasis on the nursing skills essential to meeting the physical, psychological and social needs of the child. Nursing experience in the cooperating hospitals, clinics, preschools, and schools. CSU

NURS 55. Psychosocial Nursing (6)
Lec-6, lab-16, conf-2, field trips (8 wks)
Prereq.: NURS 51
NURS 55 and 53 are half-semester courses required in the third semester of students enrolled in the curriculum in Nursing. The sequence in which students will take these courses will be determined by the Nursing Department.
The study and investigation of the etiology, dynamics, nursing care and therapeutic modalities of those persons with personality, emotional, and thought dysfunctions. Understanding of mental wellness in relation to patient education, growth and development. Emphasis placed on interpersonal and problem-solving processes used in the care of all patients. CSU

NURS 56. Advanced Medical-Surgical Nursing (6)
Lec-6, lab-16, conf-2 (8 wks)
Prereq.: NURS 53 and 55
NURS 56 and 54 are half-semester courses required in the fourth semester of students enrolled in the curriculum in Nursing. The sequence in which students will take these courses will be determined by the Nursing Department.
The nursing skills essential to meeting the physical, psychological, and social needs of patients with major medical and surgical problems; emphasis on the application of leadership and management theory to clinical practice; supervised clinical experience in cooperating hospitals and selected agencies. CSU

NURS 58. Trends and Issues in Nursing (1)
Lec-1  CR/NCR only
The historical and present trends in nursing. The legal aspects of nursing and the responsibilities of the new graduate nurse. CSU

NURS 90. Nursing Laboratory (0)
Lab-var
Coreq.: enrollment in at least one other nursing course
An open laboratory with supervision in which students may complete and/or reinforce their nursing course work. CSU
Nursing, Licensed Vocational (LVN)
The programs offered in this department include credit courses with certificates issued in Home Health Aide, Nurse Assistant and Vocational Nursing. Additionally, a noncredit course with a certificate issued is Geriatric Home Aide. A variety of courses for care of the elderly may be taken for certified nursing assistant and home health aide continuing education credit.

Announcement of Curricula

Home Health Aide/Nurse Assistant (CNA)
Graduates of this 18 week full time program will be highly qualified for entry level positions as health care providers. They are qualified for positions in acute care and convalescent facilities as well as home care agencies and out-patient clinics. Critical thinking concepts and principles will serve as a framework for studying the nursing and behavioral sciences within a health promotion/risk reduction, multicultural based curriculum.

Program Authorization: This program is approved by the California State Department of Health Services. Successful completion qualifies the graduate to: 1) take the Nurse Assistant Competency Examination to obtain State Certification for practice; 2) obtain Home Health Aide Certification without further examination.

NOTE: The Department of Health Services, Nurse Assistant Certification Division requires fingerprinting and disclosure of misdemeanor and felony convictions for all applicants.

Enrollment Procedure: Applicants must take a placement test, attend a program orientation, and meet all program prerequisites. Enrollees must be in good physical and mental health and be over 18 years of age.

Admission Requirements:
1. Recommended placement in ENGL 92 or ESL 82, or successful completion of ENGL 90 or ESL 72 with a grade of "C" or higher.
2. Business Math G, H, or J
3. A physical examination
4. Immunizations: Hepatitis B, Rubella, Varicella, Mumps, and T.B.
5. Current CPR certification
6. Department of Health Services Applications ($15 Fee)
7. DHS Application for Criminal Background Check ($32 Fee)

Requirements for a Certificate of Completion: Successful completion of the following courses require an average final grade of "C" or higher (2.00 grade point average) to qualify for a Certificate of Completion.

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>V0CN 20 Fundamentals/Home Health Aide</td>
<td>6</td>
</tr>
<tr>
<td>V0CN 21 Nurse Assistant/Convalescent</td>
<td>3</td>
</tr>
<tr>
<td>V0CN 22 Nurse Assistant/Acute Care</td>
<td>3</td>
</tr>
<tr>
<td>V0CN 23 Nurse Assistant: Convalescent Care</td>
<td>6</td>
</tr>
<tr>
<td>V0CN 24 Home Health Aide</td>
<td>3</td>
</tr>
</tbody>
</table>

Vocational Nursing Certificate Curriculum
The program of study for the certificate of completion in Vocational Nursing is designed to prepare students for employment in acute care facilities, clinics, long-term care facilities, physician offices, home care, and health centers.

Admission. Enrollment is open to all interested students who are in good physical and mental health, and over 17 years of age.

TO BE ADMITTED TO THE CURRICULUM APPLICANTS MUST:
1. Be graduates of an accredited high school or have passed the General Education Development Test (G.E.D.) or have passed the High School Proficiency Examination. Course completion of Anatomy, Physiology, Nutrition, and Pharmacology or one year as a nurse assistant preferred. (For the weekend program applicants, anatomy and physiology, nutrition and pharmacology are prerequisites.)
2. File with the Vocational Nursing Department a completed application for admission to City College (for dates, see "Calendar of Instruction").
3. Apply for admission to the curriculum for the fall semester between February 15 and May 1, and for the spring semester, between September 15 to November 15.
4. Take the City College placement tests in English and Mathematics.
5. On the basis of the placement tests and counseling or coursework, demonstrate eligibility for ENGL 94 and MATH 840.
6. Applicants must submit official transcripts.
   a. High school transcripts showing proof of completion of the 12th grade. Transcripts must be submitted in keeping with the application deadline.
   b. Applicants who are accepted in Vocational Nursing and who wish to receive credit for prior nursing education courses completed.
7. Admission of Certified Nurse Assistant, Board Challenge students transfer.
   a. C.N.A. certificate from the State of California and must have completed a credit granting, college based CNA program are eligible for at least 4 Units. Students who qualify and are interested should make an appointment with the department head for additional information and requirements.
   b. Transfer students from other accredited L.V.N. or R.N. programs are accepted in the CCSF Vocational Nursing Program. Acceptance is based on equivalent nursing education and availability of space.
   c. Board challenge applicants who need required courses for state boards should contact the vocational nursing office.
   d. Credit may not be given toward satisfying the Vocational Nursing course requirement, for courses completed 5 or more years prior to application for admission.

Credit by Examination. Applicants who qualify for admission into the Vocational Program and who have had health training courses in the military, psychiatric technician and certified nurse assistants graduates from noncredit programs who
wish to receive credit, or advanced placement should contact the vocational nursing office for additional information. Admission is based on space available.

Requirements for Certificate of Completion. Students may obtain the Certificate of Completion in Vocational Nursing by completing the following courses with an average final grade of C (2.00 grade-point average) or higher.

First Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOCN 33A Voc Nursing/Pharmacology</td>
<td>3</td>
</tr>
<tr>
<td>VOCN 33B Voc Nursing/Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>VOCN 33C Voc Nursing/Basic Skills</td>
<td>2</td>
</tr>
<tr>
<td>VOCN 33D Voc Nursing/Basic Skills Lab</td>
<td>1</td>
</tr>
<tr>
<td>VOCN 33E Voc Nursing/Fundamentals</td>
<td>7</td>
</tr>
</tbody>
</table>

Second Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOCN 34A Voc Nursing/Anatomy &amp; Physiology</td>
<td>3</td>
</tr>
<tr>
<td>VOCN 34B Voc Nursing/Medical Surgical Nursing</td>
<td>6</td>
</tr>
<tr>
<td>VOCN 34C Voc Nursing/Maternity Nursing</td>
<td>3</td>
</tr>
<tr>
<td>VOCN 34D Voc Nursing/Pediatrics</td>
<td>3</td>
</tr>
<tr>
<td>VOCN 34E Voc Nursing/Skills Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>VOCN 34F Voc Nursing/Child Development</td>
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</table>

Third Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>VOCN 35A Psychology/Soc Concepts</td>
<td>2</td>
</tr>
<tr>
<td>VOCN 35C Voc Nursing/Community Health</td>
<td>2</td>
</tr>
<tr>
<td>VOCN 35D Voc Nursing/Advanced Skills</td>
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</tr>
</tbody>
</table>

Geriatric Home Aide Noncredit Program

Program Goal. The Geriatric Home Aide program has been designed to prepare students to enter the home care field by providing job specific training for assistance to elderly persons in their own homes.

Admission Requirements. Placement test score of 6.0 in reading and math; good physical and mental health. For more information call 561-1912.

Length of Program. 4 Weeks, 26 hours per week.

<table>
<thead>
<tr>
<th>Core Courses</th>
<th>Hours/Weeks</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOCN 9981—Geriatric Home Aide (Nutr)</td>
<td>11/4</td>
</tr>
<tr>
<td>VOCN 9982—Geriatric Home Aide</td>
<td>15/4</td>
</tr>
<tr>
<td>Total</td>
<td>104</td>
</tr>
</tbody>
</table>

Requirements for Completion. Completion of required courses with C grade or higher in each course; 95% attendance.

Nursing, Licensed Vocational Announcement of Courses

CREDIT, DEGREE APPLICABLE COURSES:

VOCN 20. Fundamentals/Home Health Aide (6)
Lec-5.25, lab-5.25 (6 wks)
Advise: Eligible for ENGL 90 or ESL 62 or higher; MATH E or BSMA G, H, or J
Critical thinking concepts and principles serve as a framework for studying the nursing and behavioral sciences within a health promotion/risk reduction, multicultural based curriculum. The laboratory component emphasizes fundamental nursing skills and procedures essential to meeting the physical, psychological, and social needs of the hospitalized patient as well as those of the home bound client. CSU Qualifies the student for state certification as a Home Health Aide and meets the prerequisites for the Nursing Assistant.

VOCN 21. Nurse Assistant/Convalescent (3)
Lec-1.5, lab-7 (6 wks)
Prereq.: VOCN 20
Critical thinking concepts and principles serve as a framework for the application of fundamental nursing skills and procedures essential to meeting the physical, psychological, and social needs of Geriatric and/or the Adult patient. A heavy emphasis is placed upon utilizing: 1) the principles of prevention and rehabilitation; 2) the principles of therapeutic communication; and 3) therapeutic techniques/approaches, in dealing with the emotionally disturbed or mentally incompetent clients. CSU Successful completion qualifies the student to sit for the California State Nurse Assistant Testing Examination (Written and Practical)

VOCN 22. Nurse Assistant/Acute Care (3)
Lec-4, lab-20 (6 wks)
Prereq.: VOCN 20 and 21, or a current California CAN certificate with one years work experience
Critical thinking concepts and principles serve as the framework for the application of advanced nursing skills and procedures essential to meeting the physical, psychological, and social needs of the medical/surgical patient. The student will be introduced to the causes of disease; the body's response to disease; and the diagnosis, treatment, and prevention of disease. The Nursing Process will be utilized to develop: 1) assessment, decision making, and problem solving skills; 2) effective interview techniques; and 3) time management and prioritizing strategies. CSU

VOCN 23. Nurse Assistant: Convalescent Care (6)
Lec-5, lab-7
Integration of basic nursing concepts and skills the nursing assistant must master in order to give safe and competent patient care. Communication and interpersonal skills, infection control, safety and emergency procedures, promoting patient independence, patient/resident rights, basic nursing skills, personal care skills, mental health and social service needs, care of the cognitively impaired, basic restorative services. Clinical experience in long term care nursing facilities. CSU
VOCN 24. Home Health Aide (3)
Lec-3 (40 hour State Approved course)
Prereq.: VOCN 23 or a current CA nurse Assistant Certificate
Duties of the nursing assistant in the home setting including liability, safety, infection control, housekeeping chores, food management, laundry, and record keeping. Successful completion leads to State Certification as a Home Health Aide. CSU

VOCN 33A. Vocational Nursing/Pharmacology (3)
Lec-3
Pharmacologic principles of patient care with emphasis on body systems and medication dosage calculation, preparation, administration and storage. Instruction will include didactic and laboratory simulations. This course fulfills the Pharmacology requirements for the Board of Vocational Nurse and Psychiatric Technician Examiners. CSU

VOCN 33B. Vocational Nursing/Nutrition (3)
Lec-3
Basic concepts of nutrition for Vocational Nurses. Provides knowledge of normal and therapeutic nutrition to serve as a basis for decision-making in nursing care. Nutrition is integrated into patient care with emphasis on aspects of disease prevention. CSU

VOCN 33C. Vocational Nursing/Basic Skills (2)
Lec-1, lab-4
Prepares the student for administering basic patient care in the hospital setting. The course focuses on the following components of Vocational Nursing: medical terminology, basic nursing skills, effective communication, documentation, reporting, and ethics & the law. CSU

VOCN 33D. Vocational Nursing/Basic Skills Lab (1)
Lec-1, lab-2
Prereq.: VOCN 33C
Students will practice, perform and master basic nursing procedures in the clinical laboratory with supervision. CSU

VOCN 33E. Vocational Nursing/Fundamentals (7)
Lec-3.25, lab-15
Prereq.: VOCN 33C
Introduction of Vocational Nursing theory and practice. Didactic include gerontology and principles of nursing care for Musculoskeletal and Integumentary systems with an introduction to nursing care of the gastrointestinal system. Clinical education has both an acute and a chronic care focus. The content meets the long-term care requirement for State certification as a nursing assisting the patient in meeting his basic needs. CSU

VOCN 34A. Vocational Nursing/Anatomy and Physiology (3)
Lec-3
A study of the structure and function of the human body with practical applications for the Vocational Nurse. Emphasis placed on aiding the student in understanding the 10 body systems utilizing an applied approach. CSU

VOCN 34B. Vocational Nursing/Medical-Surgical (6)
Lec-4, lab-6.25
Prereq.: VOCN 33A-33E
Individual health care needs of adults patients with gastrointestinal, urinary, reproductive and endocrine disorders. CSU

VOCN 34C. Vocational Nursing/Maternity (3)
Lec-2, lab-5.5
Prereq.: VOCN 33A-33E
Principles and practice of obstetrical nursing care for vocational nursing. The role of the Vocational Nurse in neonatal, labor, delivery, prenatal and postpartum care are examined. CSU

VOCN 34D. Vocational Nursing/Pediatric (3)
Lec-3, lab-4
Prereq.: VOCN 33A-33E
Nursing care of children ages 0-18. Health maintenance, disease prevention and common childhood abnormalities are emphasized. CSU

VOCN 34E. Vocational Nursing/Medical/Surgical Skills (1)
Lec-1, lab-2
Prereq.: VOCN 33A-33E
Demonstration and return demonstrations of medical/surgical, pediatric and maternal child health nursing skills. CSU

VOCN 34F. Vocational Nursing/Human Development (1)
Lec-1, lab-1
Prereq.: VOCN 33A-33E
Provides the Vocational Nurse with didactic and clinical experience in early childhood education. CSU

VOCN 35A. Vocational Nursing/Psychosocial (2)
Lec-2
Prereq.: VOCN 34A-34F
Introduction to principles of psycho-social nursing. CSU

VOCN 35B. Vocational Nursing/Advanced Medical-Surgical (12)
Lec-4, lab-17
Prereq.: VOCN 34A-34F
Advanced concepts of health care needs of Adult patients with conditions of the cardiovascular, respiratory and nervous systems. Patient assessment skills and the application of nursing process in managing patient needs in the adult medical/surgical environments. Includes clinical experience in an acute setting. CSU

VOCN 35C. Vocational Nursing/Community Health (2)
Lec-1, lab-3
Prereq.: VOCN 34A-34E
Introduction to concepts of community health. Includes clinical experience in community care facilities. CSU

VOCN 35D. Vocational Nursing/Advanced Skills (1)
Lec-1, lab-2
Prereq.: VOCN 34A-34E
Demonstrate proficiency with advanced skills in medical/surgical nursing. CSU
NONCREDIT COURSES:

VOCN 9120. Care of Developmentally Disabled (24 hrs)
Prereq.: ABE 2074
Prepares students to care for developmentally disabled clients living at or in a home. Familiarization with the special needs of developmentally disabled clients. Training in skills directed at meeting those needs.

VOCN 9174. Care Of The Alzheimer Patient (24 hrs)
Prereq.: VOCN 9982; ABE 2074
Prepares students to help maintain Alzheimer clients and other adults with brain-disorders in their homes. Caregivers may be family or paraprofessionals interested in this specific area of health care. Students learn (1) about behavioral changes seen in clients, (2) how to manage problem behavior, and (3) planning for long term care.

VOCN 9189. Care Of The AIDS Patient (24 hrs)
Prereq.: AHNA 9120
Prepares certified nursing assistants and other caregivers for provision of appropriate care for AIDS patients in institutional settings, community-based hospices and private homes.

VOCN 9194. Home Health Aide-Theory/Special (120 hrs)
Prereq.: ESLN 3500 or ABE 2073
Principles of personal care for the adult and geriatric client requiring home care. Emphasis for students re-entering the job market and those with Cantonese/Mandarin bilingual skills. Certification by the State of California upon successful completion of theory and clinical components.

VOCN 9195. Home Health Aide-Clinical/Special (50 hrs)
Prereq.: ESLN 3800 or ABE 2073
Clinical application of theory prepares the individual to render home care to the adult and geriatric client. Designed for re-entry students and those with Cantonese/Mandarin bilingual skills. Certification by the State of California upon successful completion of theory and clinical components.

VOCN 9200. Licensed Vocational Nurse Refresher (455 hrs)
A comprehensive review of the principles and practices of Licensed Vocational Nursing including a State Board Review Program.

VOCN 9981. Geriatric Home Aide(Nutrition) (44 hrs)
Prereq.: ABE 2073; ESLN 3800
Prepares graduates to provide cooking, shopping and cleaning services for ambulatory elderly clients in their own home setting. Includes dietary needs of geriatric and AIDS patients, cultural foods, cooking demonstrations, safe sanitation practices.

VOCN 9982. Geriatric Home Aide (60 hrs)
Prereq.: ESLN 3800; ABE 2073
Prepares graduates to care for ambulatory elderly clients in their own home setting. Includes the needs of the clientele and the skills necessary to meet these needs. Information essential to secure employment in the home care field.

AHGE 9493. Training Program for Administrators of Residential Care Homes
Preparation of caretakers for care of chronically mentally ill and/or physically frail adults in residential care homes. Emphasis on the emotional, physical, and medical problems of clients. Skills in operating a board and care home will be stressed.

Oceanography
See Earth Sciences listings

Older Adults
Announcement of Courses

NONCREDIT COURSES:
General Classes

OLAD 7000. Multimedia for Older Adults
A full-day program of diverse activities that may include crafts, music, dance, exercise, discussions, service projects, field trips, and opportunities to learn various new skills.

OLAD 7006. Understanding Changing Times
Activities focus on personal, social, political, and wellness issues; field trips may be included.

OLAD 7501. Introduction to Computers
An introduction, for older adults, to the basic concepts and techniques of personal computers, presented in an unhurried, non-competitive environment with guided practice. Topics include microcomputer parts, file and directory structures, operating systems, and elementary concepts of word processors, spreadsheets, databases, and the internet, with the opportunity to pursue special projects.

Health

OLAD 7200. Exercise and Relaxation Techniques for Older Adults
Designed for older adults who wish to explore and participate in a number of exercises suitable to their physical condition. Modified hatha yoga, body mechanics, back care, breathing, relaxation, meditation and flexibility exercises are included in the curriculum. T'ai chi is also offered.

OLAD 7205. Wellness Exercises
Moderate exercises designed for either older adults with limited physical abilities or those who are re-introducing themselves into a physical fitness program. Some classes emphasize t'ai chi.

OLAD 7209, Mind-Body Health
A discussion and practice class for improving one's health through an understanding of the impact of thoughts, emotions, and attitudes on the body. Practice sessions involve gentle exercises based on t'ai chi.
Personal Enrichment

OLAD 7300. Art for Older Adults
Open to beginning and advanced students. Using oil paints, water color, or both, the students will study and work to develop different painting techniques through a series of exercises. The student will receive individual instruction to mix colors, work from still life materials, work from landscapes, and eventually work from live models. Students provide their own materials.

OLAD 7301. Arts and Crafts For Older Adults
A general survey of arts and crafts with an emphasis on exercises and experiments with methods and materials, including: painting, drawing, color theory, composition rendering, batik, tie-dye, macrame, block printing, ceramics, metal crafts, copper enameling, leather, and weaving.

OLAD 7303. Figure Drawing - Older Adults
Studio class in drawing the human figure from a live model. For beginners to professionals. Pencil, charcoal, ink, and watercolors.

OLAD 7307. Music Appreciation - Older Adults
Study of and familiarization with the music of western civilization. Students are introduced to a sampling of music from ballets, operas, and symphonies. Public performances.

OLAD 7309. Theater Appreciation - Older Adults
Students read plays, attend performances, and develop critical skills in discussion groups. The history of theater, elements of dramatic literature, and production techniques are covered.

OLAD 7310. Stitchery For Older Adults
Patchwork, quilting, trapunto, cross stitch, embroidery stitches. Dressmaking and tailoring.

OLAD 7313. Art Appreciation - Older Adults
Introduction to art, painting and sculpture from the Lascaux cave paintings to modern art. Topics include the biography and personalities of various artists; art styles, periods, philosophy; and the social-historical factors contributing to the development of art.

OLAD 7316. Life Sculpture-Older Adults
Older Adults learn sculpture in a supportive studio atmosphere. Students work primarily in clay from a live model.

Writing

OLAD 7400. Journal Writing - Older Adults
Development of writing skills through journal keeping. Students acquire insight and awareness by the practice of writing techniques such as creative exercises, dialogues and monologues, stories, description, dreams, letters, memoirs, and poetry.

OLAD 7401. Writers' Workshop - Older Adults
Develop writing skills in a peer support group. Students may choose to work on prose and/or poetry and read their work in class. Learning how to respond to writing, guided creative exercises and assignments, sentence and story structure are covered.

OLAD 7402. English - Women's Literature
Survey of works by and about women, including novels, short stories, essays, biography, and poetry. Development of reading and critical thinking skills. Each semester focuses on either American or international authors.

Paleontology
See Earth Sciences listings

Philippine Studies

Announcement of Courses

For the curriculum in Philippine Studies, see the "Program in Ethnic Studies."

CREDIT, DEGREE APPLICABLE COURSES:

PHST 10. Independent Study (3)
Ind st-15 CR/NCR avail.
Independent reading and research in Philippine Studies. The student is required to submit an essay or project on a topic that the instructor has approved in advance. This project must have strong relevancy within the area of Philippine Studies and meets the student's own educational resources and needs. CSU/UC

PHST 20. The Filipino Family (3)
Lec-3 CR/NCR avail.
A survey of adaptation to internal and external forces of change that have buffeted and changed the modern Filipino family. Description and analysis of traditional and contemporary Filipino family systems as they respond to the nature and changes within the larger Philippine society and culture. CSU/UC

PHST 30. Philippine Society and Culture Through Film (3)
Lec-3 CR/NCR avail.
An examination of Filipino/Philippine films for expressions of various cultural themes and socio-political influences on the Filipino experience; includes: the use and meaning of language for Filipinos, images of Filipinos, interpersonal relations, isolation, sex roles, "The Filipino Dream," immigration, and bicultural alienation. CSU/UC

ANTH 15. Philippine Culture and Society (3)
Lec-3 CR/NCR avail.
Introduction to the development of Philippine culture and the impact of Western civilization on the people; emphasis on the ways of life in Philippine rural and urban areas and also tribal cultures. CSU/UC

ASAM 8. Filipino-American Community (3)
Lec-3 CR/NCR avail.
Not open to students who have completed ASAM 7
Description and analysis of Filipino-American community problems from a sociological viewpoint. Cultural shock and other problems of adaptation of Filipino immigrants considered in light of the carryover from Filipino culture and psychology. CSU/UC
### GLST 50. Gay/Lesbian/Bisexual/Transgender Communities of Color in the U.S. (3)
Lec-3
CR/NCR avail.
Examination of the formation of lesbian/gay/bisexual and transgender identities and communities among people of color in the United States. Included are African Americans, Native Americans, Asian Americans, Pacific Islanders, and Chicano/Latinos. CSU/UC

### HIST 36. History of Southeast Asia (3)
Lec-3
CR/NCR avail.
A survey of the history of southeast Asia, with emphasis on the role of the United States in Southeast Asia. CSU/UC

### HIST 37. History of the Philippines (3)
Lec-3
CR/NCR avail.
The historical and cultural growth of the Philippines, including the development of national culture, political and social institutions, and foreign relations. CSU/UC

### IDST 36. Poetry for the People (3)
Lec-3
CR/NCR avail.
An interdisciplinary poetry course which explores the poetry of African Americans, Latino(a)s, Asian Americans, and Native Americans, including poetry by incarcerated people and by poets of all sexual orientations. Use of tapes, recordings, films, poetry readings, and discussions, close readings, guest lectures and performances to
1. identify poetry that is accessible to the general community and
2. develop strategies and various media for making poetry available to diverse communities. CSU/UC

### HIST 39. The United States Presence in the Western Pacific Rim: An Introduction (3)
Lec-3
CR/NCR avail.
A survey course on the evolution of US interests, expansion and foreign policies in the Western Pacific Rim area, specifically the countries in East Asia and Southeast Asia. CSU/UC

### IDST 37. Ethnic Minorities in the United States (3)
Lec-3
CR/NCR avail.
An interdisciplinary survey of the history, culture, problems, and conditions of American ethnic minorities and the effects of racism, prejudice and discrimination on emerging minority groups in the United States. CSU

### IDST 40. Introduction to Contemporary Issues in the Filipino Community (3)
Lec-3, field trips
CR/NCR avail.
A survey of contemporary social, economic, cultural, and political issues of importance to the Filipino community; includes defining Filipino community populations; immigration and adaptation; socioeconomic status, employment, mental health issues, political empowerment, leadership, and national and regional conflicts. CSU/UC

### IDST 42. Philippine Humanities (3)
Lec-3
CR/NCR avail.
Appreciation and critical evaluation of Filipino philosophy, literature, art, music, and dance for the purpose of developing an aesthetic sense and cultural acceptance. Exposure to the best of these forms through readings, recordings, films, and field trips. CSU/UC

### PIL 1. Elementary Pilipino (5)
Lec-5, lab-2
CR/NCR avail.
Advis: Eligible for ENGL 94 or higher or ESL 82 or higher, or any City College or university foreign language course.
Beginner's course. Grammar, composition, and reading. Practice in speaking and understanding simple Pilipino. CSU/UC

### PIL 2. Continuation of Elementary Pilipino (5)
Lec-5, lab-2
CR/NCR avail.
Prereq.: PIL 1
Second semester course. Completion of elementary grammar, composition, and reading. Continued practice in conversation. CSU/UC

### PIL 10A-10B-10C. Conversational Pilipino (3-3-3)
Lec-3, lab-2
CR/NCR avail.
Prereq.: PIL 10B: PIL 10A
PIL 10C: PIL 10B
Intensive instruction and practice in spoken Pilipino. CSU

### PIL 39A-39B. Philippine Literature in Translation (3-3)
Lec-3
CR/NCR avail.
Advis: Eligible for ENGL 1A
Reading and discussion of important works of Philippine literature in English translation. CSU/UC
- PIL 39A. Philippine literature to 1940.
- PIL 39B. Philippine literature from 1940 to the present.

### POLS 47. Government and Politics of Southeast Asia (3)
Lec-3
CR/NCR avail.
A survey of political developments and changes in Southeast Asian states (the Philippines, Indonesia, Malaysia, Thailand, and Singapore) and such other states as Viet Nam, Laos, Cambodia, and Burma. Internal politics and international relations. CSU/UC

### PSYC 22. The Psychology of Minority Groups (3)
Lec-3
CR/NCR avail.
Not open to students who are enrolled in or who have completed PSYC 23
An examination of the psychological aspects of minority group relations. A psychohistorical analysis of the treatment of African Americans, Asian Americans, Mexican Americans/Latino Americans, and Native Americans in the USA. Emphasis on the strengths and unique contributions of minorities to the USA. CSU

### PSYC 23. The Psychology of Minority Groups (3)
Lec-3
CR/NCR avail.
Prereq.: PSYC 1
Not open to students who are enrolled in or who have completed PSYC 22
An examination of the psychological aspects of minority group relations. A psychohistorical analysis of the treatment of African Americans, Asian Americans, Mexican Americans/Latino Americans and Native Americans in the USA. Emphasis on the strengths and unique contributions of minorities to the USA. CSU/UC
Philosophy
Announcement of Courses

CREDIT, DEGREE APPLICABLE COURSES:

Except for PHIL 12B, philosophy courses may be taken in any order. Both PHIL 2 & 4 are recommended as introductory courses.

PHIL 2. Introduction to Philosophy: Moral and Political Philosophy (3)
Lec-3
Advis: Eligible for ENGL 1A
An examination of such questions as: Are value and moral judgments only the conventional prejudices of society or are there conditions under which value judgments can be rationally defended? If there are such grounds, what are they? If not, what consequences, if any, follow from ethical skepticism? Can value judgments about individuals or societies be justified on rationally acceptable grounds? CSU/UC/CAN: PHIL 4

PHIL 4. Introduction to Philosophy: Knowledge and Its Limits (3)
Lec-3
Advis: Eligible for ENGL 1A
The tools and techniques of philosophical reasoning: reading argumentative prose; analyzing conceptual models; writing critical essays. Problems of knowledge: the criteria of reliable knowledge; the formulation and justification of beliefs; the sources and limits of knowledge; beliefs about the physical world, the past and future, and other minds. Critical standards applied to related metaphysical issues: theism, mind and self-identity, determinism. CSU/UC/CAN: PHIL 2

PHIL 25A. Ancient Philosophy (3)
Lec-3
Advis: Eligible for ENGL 1A
The origins of the philosophical-scientific tradition. Early attempts at rational explanations of the natural world. Socrates and the foundations of moral criticism. Plato: his articulation of the problems of knowledge, and contributions to moral and political theory. Aristotle: his organization of scientific inquiry, formulation of ethical theory, and development of the science of logic. The philosophic tradition after Aristotle. CSU/UC/CAN: PHIL 8; PHIL 25A+25C: PHIL SEQ 2

PHIL 25C. Modern Philosophy through Kant (3)
Lec-3
Advis: Eligible for ENGL 1A
The philosophic tradition from the Renaissance to the nineteenth century. Emphasis on new models of human knowledge and human nature formulated in reaction to scientific and social revolutions. Positions of thinkers such as Descartes, Hume and Kant on basic questions such as "Can anything be known with certainty?", "Are there any justifiable moral principles?", "Is there any purpose to existence?" CSU/UC/CAN: PHIL 10; PHIL 25A+25C: PHIL SEQ 2

PHIL 40. Logic: An Introduction to Critical Thinking (3)
Lec-3
A course in practical reasoning. How to distinguish between reasons that are rational and those that are not. Methods of evaluating arguments that will lead to the truth. CSU/UC

PHIL 51-52-53. Selected Topics in Philosophy (1-2-3)
Lec-1,2,3
Repeat: if no topic repeat
Investigation of a broad range of ideas, issues, figures, and movements. CSU

Photography
Announcement of Curricula

General Information
The Program provides conceptual, aesthetic, and practical skills training for the beginning through advanced photography student. An emphasis on technical skills is fundamental to the program. This, along with training in design, aesthetics, and concepts in photographic imagery, produces graduates who can realize their creative aspirations and be competitive in today’s job market. The program of study provides a core curriculum of required courses that cover all key areas of commercial and creative photography. Elective classes offer the opportunity for specialized or individualized study and cover a range of traditional and emerging approaches in photography including advanced studio or location lighting, advanced digital imaging, expressive alternatives, and a guest lecture series.

The program is designed to prepare students for a wide range of careers in photography or for transfer to institutions of higher education for advanced study. The practicing photographers on our faculty bring their professional experience, interests, and specializations to create a program with breadth and depth.
Career Opportunities. Students in the curriculum in Photography are trained in the major branches of photographic work. Positions for which graduates may qualify, depending upon their interests, abilities, and achievement, include those of industrial, commercial, portrait, illustrative, advertising, freelance, editorial, and public-relations photographer; photographic-laboratory technician; photographic salesperson; and operator of a photographic business. The curriculum includes training in specialized fields such as digital photography. The course of study requires two years.

Work-Experience Training. Students majoring in photography may obtain practical experience in the photographic industry by enrolling in a work-experience course. To receive credit, students must work at least ten hours weekly in an approved position. The College helps students in the course find salaried employment. Placement depends upon students' abilities and records, employers' requirements, and economic conditions. Students are supervised by both employers and instructors. Students may receive a maximum of four semester units in approved work experience coursework.

Associate in Science Degree and Award of Achievement. The program is designed so that students may satisfy the requirements for graduation from the College. Students who satisfy these requirements receive the Award of Achievement in Photography if they complete the required program of study with a B minus (2.75 grade-point average) or higher. The program adviser of the Photography Department will help students who desire to plan special programs of study. Students who complete such programs in accordance with the regulations of the department will receive the Award of Achievement in Photography.

NOTE: Due to the extensive use of materials in lab and studio classes, students will be required to pay a materials fee.

Courses Required for the Award of Achievement in Photography

First Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>PHOT 50A or 50B History &amp; Aesthetics of Photo</td>
<td>4</td>
</tr>
<tr>
<td>PHOT 51 Beg Black &amp; White Photo</td>
<td>3</td>
</tr>
<tr>
<td>PHOT 53 Photographic Design</td>
<td>2</td>
</tr>
<tr>
<td>PHOT 150 Photographic Lab</td>
<td>0</td>
</tr>
<tr>
<td>Additional graduation requirements</td>
<td></td>
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Second Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>PHOT 55 Beg Color Photography</td>
<td>3</td>
</tr>
<tr>
<td>PHOT 81A Inter Black &amp; White Photo</td>
<td>3</td>
</tr>
<tr>
<td>PHOT 83 View Camera Techniques</td>
<td>2</td>
</tr>
<tr>
<td>PHOT 85A Beginning Lighting Techniques</td>
<td>4</td>
</tr>
<tr>
<td>PHOT 150 Photographic Lab</td>
<td>0</td>
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<tr>
<td>Additional graduation requirements</td>
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Third Semester

<table>
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<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>PHOT 60A Beginning Computer Imaging</td>
<td>2</td>
</tr>
<tr>
<td>PHOT 85B Adv Studio Lighting Techniques</td>
<td>4</td>
</tr>
<tr>
<td>PHOT 93 Editorial Photography</td>
<td>2</td>
</tr>
<tr>
<td>PHOT 95A Beginning Color Printing</td>
<td>4</td>
</tr>
<tr>
<td>PHOT 150 Photographic Lab</td>
<td>0</td>
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<tr>
<td>Additional graduation requirements</td>
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Fourth Semester

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<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>PHOT 81B Adv. Black and White Darkroom Tech.</td>
<td>4</td>
</tr>
<tr>
<td>PHOT 90 Portraiture</td>
<td>4</td>
</tr>
<tr>
<td>PHOT 99 Business Practices of Photography</td>
<td>3</td>
</tr>
<tr>
<td>PHOT 150 Photographic Lab</td>
<td>0</td>
</tr>
<tr>
<td>Photography elective</td>
<td>2</td>
</tr>
<tr>
<td>Additional graduation requirements</td>
<td></td>
</tr>
</tbody>
</table>

Elective Courses: In choosing electives, students should take at least two units from the following list of courses. Students should select electives in consultation with their program adviser. PHOT 52, 57, 60B, 82, 86, 89, 95B, 101-104, 117, 118, 130.

Photography
Announcement of Courses

CREDIT, DEGREE APPLICABLE COURSES:

PHOT 50A. History and Aesthetics of Photography (4)
Lec-4, field trips CR/NCR avail.
Illustrated lectures on the achievements of important photographers. Designed to stimulate visual thinking and creative problem solving. Visits to museums, films and slide lectures. CSU/UC

PHOT 50B. History and Aesthetics of Photography Since 1945 (4)
Lec-4, field trips CR/NCR avail.
History of photography since 1945, highlighting achievements of important photographers. Designed to stimulate visual thinking and creative problem solving. Topics covered are: avant garde, surrealism, symbolism, fictional photographs, structuralists, post-modernism, pop art, current usages of landscape images, contemporary color, and photography's interactions with modern painting, video, performance and computer. Visits to museums and galleries. CSU/UC

PHOT 51. Beginning B & W Photography (3)
Lec-2, lab-3, field trips CR/NCR avail.
Advisement: PHOT 53 (concur.)
Development and application of black and white photographic skills and processing practices as they relate to the beginning photographer. Applications focus on performing beginning camera functions, learning and applying exposure calculations (in daylight and nighttime situations), comparing and contrasting various film types, employing camera filters effectively, the basic use of electronic flash, and an analysis of lighting. Laboratory skills include basic negative processing, contact printing, enlarging, and mounting. CSU/UC

PHOT 52. Photographers and Their Images (1)
Lec-1 CR/NCR avail.
Repeat: max. 2 units
Professional photographers present and discuss their work in both technical and aesthetic terms. This is a unique opportunity for photography students to meet world renowned photographers and to discuss topics in a question and answer format. CSU
PHOT 53. Photographic Design and Concepts (2)
Lec-3, lab-1, field trips CR/NCR avail.
Prereq.: PHOT 51 (concur.) or demonstration of exit skills.
Design and concept elements necessary for the formulation of photographic images; communication and expression of photographic ideas; exploration of conceptual and formal design of photography. CSU

PHOT 55. Beginning Color Photography (3)
Lec-3, field trips CR/NCR avail.
Prereq.: PHOT 51 or demonstration of exit skills.
Advis: PHOT 53 (concur.)
Basic principles of photographing with slide film; special demands of color technique; color relationships; light qualities; kinds of films; class demonstrations; critiques of color transparency. CSU

PHOT 57. Photography and Multimedia (3)
Lec-3, lab-1 CR/NCR avail.
Prereq.: PHOT 51; IDST 120
Coreq.: IDST 130
An introduction to the role of photography in multimedia. Beginning digital imaging, image acquisition, hardware, software, and production processes through demonstrations and laboratory assignments. CSU

PHOT 60A. Beginning Computer Imaging (2)
Lec-2, lab-1, field trips CR/NCR avail.
Prereq.: GRPH 25 or CIS 100M or demonstration of exit skills.
Advis: PHOT 51
Introduction to the field of computerized electronic imaging. Emphasis on technical aspects of digital photography. Demonstrations of software and hardware. Includes in-class lab exercises. CSU

PHOT 60B. Advanced Computer Imaging (3)
Lec-2, lab-3, field trips CR/NCR avail.
Prereq.: PHOT 60A or demonstration of exit skills.
Advis: PHOT 55 or GRPH 31
Hands-on class emphasizing advanced techniques for manipulating, altering, and enhancing digital images. Technical and creative issues are addressed. CSU

PHOT 81A. Intermediate Black and White Photography (3)
Lec-3, lab-3, field trips CR/NCR avail.
Prereq.: PHOT 51 or demonstration of exit skills.
Advis: PHOT 53
Emphasis on B/W exposure control and darkroom technique using small and medium format cameras. Includes camera filters, push processing, more advanced darkroom controls, greater speed and responsiveness to subject matter, and a deeper understanding of photographic theory and its application. CSU

PHOT 81B. Advanced Black and White Darkroom Techniques (4)
Lec-3, lab-3, field trips CR/NCR avail.
Prereq.: PHOT 81A or demonstration of exit skills.
Repeat: max. 8 units
An intensive exploration of the controls and materials of the black and white photographic process. The course emphasizes fine printing, optimization of the negative, archival processing procedures, and analysis of papers and developer combinations. CSU

PHOT 82. Zone System Techniques (3)
Lec-2, lab-4, field trips CR/NCR avail.
Prereq.: PHOT 81A or demonstration of exit skills.
Advis: PHOT 83
Repeat: max. 6 units
An exploration of the Photographic Zone System through use of special light metering, processing, and fine printing techniques. A study of the integration of aesthetics, calibration of camera and exposure meter to film, calibration of film to photographic printing papers, development of film for specific lighting conditions, printing and other techniques associated with the Photographic Zone System required for assignments. The production of a fine portfolio of images using the Zone System for presentation to clients or galleries and museums. CSU

PHOT 83. View Camera Techniques (2)
Lec-2, lab-1, field trips CR/NCR avail.
Prereq.: PHOT 51 or demonstration of exit skills.
An exploration of the view camera through hands-on experience. Investigation of perspective control, camera movements, film, processing, and printing as applied to studio, architecture, and fine arts photography. The Department will provide students with 4 x 5 cameras. CSU

PHOT 85A. Beginning Lighting Techniques (4)
Lec-3, lab-3 CR/NCR avail.
Prereq.: PHOT 51 or demonstration of exit skills.
Advis: PHOT 53, 55, and 83 (concur.)
Through demonstration and hands on experience students explore the basic and technical use of ambient, tungsten and electronic flash illumination as it is used with color and black and white film. Students will work with a variety of lighting equipment and accessories. CSU

PHOT 85B. Advanced Studio Lighting Techniques (4)
Lec-4, lab-2
Prereq.: PHOT 55, 83, 85A or demonstration of exit skills.
Advanced lighting techniques with an emphasis on electronic strobe and mixed lighting methods as used in advertising and product photography. Emphasis is on client-photographer relationships, solving photographic problems imaginatively, and building a quality portfolio. CSU
PHOT 86. Mixed Media and the Photographic Image (3)
Lec-2, lab-3  
Prereq.: PHOT 81A or demonstration of exit skills.  
Adviser: PHOT 53  
Repeat: max. 6 units  
An exploration of the photographic image, exposing students to the concept of manipulation of the original to reveal forms of expression which are unattainable through traditional photography. Emphasis will be given not only to established non-silver processes, but also to the integration of more contemporary media. CSU

PHOT 89. Large Format Transparency (3)
Lec-1, lab-3  
Prereq.: PHOT 83, 85A or demonstration of exit skills.  
Adviser: PHOT 55  
Repeat: max. 6 units  
An advanced, large format transparency (4x5) course with emphasis on color principles carried to further refinement and practical applications in studio and field location photography. Special emphasis on product, interior and exterior photography, solving mixed lighting problems, utilization of special effects, and the building of a professional portfolio for job applications and presentations. CSU

PHOT 90. Portraiture (4)
Lec-3, lab-3  
CR/NCR avail.  
Prereq.: PHOT 85A or demonstration of exit skills.  
Adviser: PHOT 83  
Introduction to photographing people utilizing tungsten, strobe, and daylight with emphasis on creating as well as interpreting the personality. Using multiple lighting techniques in studio and on location; working successfully with subjects. Analysis and application of lighting techniques for social portraiture including weddings, schools, yearbooks, families, and executives. CSU

PHOT 93. Editorial Photography (2)
Lec-2, lab-1  
CR/NCR avail.  
Prereq.: PHOT 81A or demonstration of exit skills.  
Techniques leading to a creative treatment of typical editorial assignments, including use of several format cameras, variable lenses, multiple electronic flash and typical effects essential to quality storytelling pictures. Students produce a portfolio including feature news, publicity, public relations, and feature story photographs. CSU

PHOT 95A. Beginning Color Printing (4)
Lec-3, lab-3  
CR/NCR avail.  
Prereq.: PHOT 55 or demonstration of exit skills.  
Exploration of color negative printing through an understanding of exposure, color films, papers, processing, color temperature and color theory. Sensitometry and densitometry as they apply to color negative printing. Emphasis is also placed on the aesthetics of color photography. CSU

PHOT 95B. Intermediate Color Printing (4)
Lec-3, lab-3  
Prereq.: PHOT 95A or demonstration of exit skills.  
Repeat: max. 8 units  
Refinement of techniques learned in Photo 95A emphasizing professional color output. Color prints from slides, negatives and inter-negatives. In addition, a semester project of portfolio quality will be completed. CSU

PHOT 99. Business Practices of Photography (3)
Lec-3, field trips  
CR/NCR avail.  
A course for both commercial and fine arts photographers who want to run a successful business. Topics include promotion, freelance skills, billing, taxes, pricing your work and copyright laws. CSU

PHOT 101-102-103-104. Selected Topics in Photography (1-2-3-4)
Lec-1,2,3,4 and/or lab-2,3,6, field trips  
CR/NCR avail.  
Prereq.: varies with topic  
Exploration of selected topics in photography. CSU  
PHOT 102A. Basic Architectural Photography  
PHOT 102B. Documentary/News Photography

PHOT 117A. Photographic Work Experience (2)
Conf-1, work-10  
Repeat: max. 8 units  
Work experience is supervised off-campus work in photography or closely allied fields. Students can be employed in any area including but not limited to laboratory technicians, camera operators, or salespersons. These include, but are not limited to newspaper internships, assistant internships, museum internships, gallery internships, and laboratory printing internships. CSU

PHOT 117B. Internship and Work Experience (2)
Conf-1, work-10  
Repeat: max. 8 units  
Work experience and internships are supervised off-campus work in photography or closely allied fields. Work experience students will supply their own employment. Internship positions are supplied by the photography department when possible to students who have the required skills. CSU

PHOT 118. Independent Study (2)
Ind st-10  
CR/NCR avail.  
Prereq.: PHOT 85B and either 81B or 95A or demonstration of exit skills  
Repeat: max. 4 units  
Work on an independent photographic project having significant learning value in photography and acceptable to both the student and the instructor. Projects may be in photographic research, photographic criticism, computer imagery, or any other photographic performance area. CSU
PHOT 130. Portfolio Production (2)
Conf-2
Prereq.: PHOT 93; 81B or 95A; 85B or 90
Repeat: max. 4 units
Student production of a professional portfolio that can be used for job applications. The student is advised by the instructor while producing photographs, professionally mounted, which demonstrate proficiency in photography. Emphasis on developing depth in a particular area of interest and/or proficiency in several areas of professional photography. CSU

PHOT 150. Photographic Laboratory (0)
Coreq.: Enrollment in a laboratory course in photography
An open laboratory in which students may complete their photographic assignments. Required of all students who are enrolled in a laboratory course in photography. CSU

Physical Education and Dance
Announcement of Courses

The following physical education courses are activity courses:
3, 4, 5, and all courses 400 through 599.

CREDIT, DEGREE APPLICABLE COURSES:

P E 3. Dance Composition (3)
Lab-10
Repeat: max. 9 units
A course in dance techniques and choreography, culminating each semester in a studio demonstration or concert program. CSU/UC

P E 4. Basic Movement (2)
Lec-1, lab-3
Repeat: max. 8 units
Basic locomotor and ball handling skills, rhythms, and body mechanisms. Flexibility, strength, coordination, and general conditioning. CSU/UC

P E 5A-5B-5C. Folk Dance Production (1-2-3)
Lab-2, 4, 6; field trips CR/NCR only
Advise: P E 518
Repeat: combination total 4 times
Courses may be taken in any sequence
Students will learn staged versions of intermediate and advanced level folk dances for performances in various settings. Attention is given to adaptation of authentic costumes for the stage, as well as other theatre disciplines such as lighting, programming, and event management. CSU/UC

P E 6. Care and Prevention of Athletic Injury (3)
Lec-2, lab-2
A scientific approach to athletic training and conditioning programs. A practical laboratory to ensure skills in taping, injury care, massage, and training-room procedures. CSU/UC

P E 7. Introduction to Coaching and Officiating in Athletic Games (3)
Lab-3
Theory and practice of the techniques of coaching and officiating in highly organized games. CSU/UC

P E 8. Introduction to Fitness, Training and Human Performance (3)
Lec-3
Overview of fitness, fitness assessment, training and human performance, including cellular adaptations to exercise, the physiological basis and scope of training, principles of training and training factors, components of training, training states, recovery methods and philosophy of training. CSU

P E 9A. Fit or Fat: Exercise and Diet (2)
Lec-2
Comparison of obesity theories, current weight loss methods and associated technology. Determine and track change in fitness levels, plan a fitness program, and participate in a variety of exercises to promote an active lifestyle, emphasizing weight loss. CSU

P E 10. Appreciation and Analysis of Individual and Team Sports (2)
Lec-2 CR/NCR avail.
Emphasis on systems of play, strategy, rules, training programs, organizational procedures, and background for both spectators and participants. CSU/UC

P E 12. Folk, Social, and Square Dancing Activities Analysis (2)
Lec-2
Advise: P E 518 and/or P E 535A
Philosophy, history, teaching methods, and presentation; compilation of dance directions; analysis of individual difficulties and correction. CSU/UC

P E 13. Sport and Society (3)
Lec-3
An introduction to the sociology of sport, to discuss and analyze issues about sports as a part of society. The history of sport, competition, children's programs, deviance, aggression, coaches in the sport experience, gender, ethnicity, social mobility, the economy, the media, and politics in sports. CSU

P E 17A-17B-17C. Dance Production (1-2-3)
Lab-2, 5, 7 CR/NCR only
Repeat: combination total 4 times
Courses may be taken in any sequence
Participation in theatre disciplines such as lighting, sound, stage management, set design and costume; development of choreographing and performing skills to be used in a theatre or studio dance production. CSU/UC