

## English (ENG)

Contact the English Department for further information, (760) 744-1150, ext. 2392

Associate in Arts degree requirements, Certificate of Achievement requirements, and Certificate of Proficiency requirements are listed in Section 6 (green pages) of the catalog.

### PROGRAM OF STUDY

#### English

Focuses on the English language and literatures in English. Provides the background for students to succeed in diverse fields, such as advertising and marketing, teaching, journalism and telecommunications, law, technical writing, and business administration. Prepares students for upper division course work in English. For specific transfer requirements, the student should consult an academic counselor or the catalog for the school to which he or she wishes to transfer.

#### AA DEGREE MAJOR

Program Requirements	Units
ENG 205 and Introduction to Literature	3
ENG 202 or Critical Thinking /Composition	
ENG 203 Critical Thinking/Composition Through Literature	4

**Literature Surveys (Select 9 Units).** Of these nine units, students must take either a two-semester survey of British literature or a semester each of British and United States literature.

ENG 210 Survey of British Literature I	3
ENG 211 Survey of British Literature II	3
ENG 220 Survey of World Literature I	3
ENG 221 Survey of World Literature II	3
ENG 225 Literature of the United States I	3
ENG 226 Literature of the United States II	3

**Elective Courses (Select 2 courses)** Any of the above courses not previously taken or pick from the following:

ENG 110 The Study of English Grammar	3
ENG 135 Introduction to Creative Writing	4
ENG 136 Intermediate Creative Writing	4
ENG 137 The Literary Magazine: History/Production	4
ENG 215 Introduction to the British Novel	3
ENG 230 Introduction to the American Novel	3
ENG 240 Introduction to Classical Mythology	3
ENG 245 Survey of Biblical Literature	3
ENG 250 Introduction to Shakespeare	3
ENG 260 Literature Through Film	3
ENG 265 Science Fiction	3
ENG 270 Popular Literature	3
ENG 280 Women and Literature	3

**TOTAL UNITS** 22-24

#### COURSE OFFERINGS

Courses numbered under 50 are non-degree courses.

Courses numbered under 100 are not intended for transfer credit.

Any student wishing to earn an A.A. degree must complete ENG 100 with a grade of 'C' or better. The student must participate in the English placement process before enrolling in any English or English as a Second Language composition class except ENG 10, 110 and 150. The eligibility will indicate whether the student may enroll in ENG 50 or ENG 100. Students whose first language is not English may find, however, that ESL instruction meets their needs better than immediate enrollment in ENG 10 or 50. Such students may take one or more ESL classes (ESL 101, 102, 103) instead; then by again participating in the English placement process, they may qualify for ENG 50 or ENG 100. Non resident international students may be required to take one or more classes of English as a Second Language.

Students should sign up for English assessment as soon as possible because some students may take three or more semesters to finish the competence in English. Please contact the Counseling Department for the English assessment schedule.

**ENG 10 English Essentials (4)**  
4 hours lecture

**Note:** A grade of 'C' or better is required for eligibility for ENG 50  
Offers basic instruction in grammar, usage, mechanics, sentence structure, and paragraph and essay development.

**ENG 50 Introductory Composition (4)**  
4 hours lecture

**Prerequisite:** A minimum grade of 'C' in ENG 10 or eligibility determined through the English placement process

**Note:** A grade of 'C' or better is required for eligibility for ENG 100  
A writing course for the student who wants to develop fundamental essay writing skills, acquire an A.A. degree, or enter a transfer program, but who needs further preparation in composition skills.

**ENG 97 English Topics (.5-4)**

Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture, laboratory, or lecture/laboratory may be scheduled by the department. Refer to Class Schedule.

**Note:** May be taken 4 times  
Topics in English. See class schedule for specific topic covered. Course title will designate subject covered.

**ENG 100 English Composition (4)**  
4 hours lecture

**Prerequisite:** A minimum grade of 'C' in ENG 50 or eligibility determined through the English placement process

**Note:** May not be taken for Credit/No Credit grading  
**Transfer acceptability:** CSU; UC; CAN ENGL 2  
Practice in expository and argumentative writing based on analytical reading and critical thinking. Topics include methods of invention, organization and development, principles of basic research, and the elements of style.

**ENG 110 The Study of English Grammar (3)**  
3 hours lecture

**Transfer acceptability:** CSU  
An intensive study of both traditional and modern approaches to English syntax that provides insights into how English works as well as a review of the major concerns of prescriptivism.

**ENG 135 Introduction to Creative Writing (4)**  
4 hours lecture

**Prerequisite:** Eligibility for ENG 100  
**Transfer acceptability:** CSU; UC  
Provides practice, instruction, and analytical research in writing fiction and poetry. Students submit both creative and analytical writing which will be presented for workshop discussion and critique. Lectures present a variety of prose and verse forms.

**ENG 136 Intermediate Creative Writing (4)**  
4 hours lecture

**Prerequisite:** Eligibility for ENG 100  
**Transfer acceptability:** CSU; UC  
Provides practice, instruction, and analytical research in writing fiction and poetry. Students submit both creative and analytical writing which will be presented for workshop discussion and critique. Lectures present a variety of prose and verse forms.

**ENG 137 The Literary Magazine: History and Production (4)**

8 hours lecture/laboratory  
**Recommended preparation:** Eligibility for ENG 100  
**Note:** May be taken 4 times  
**Transfer acceptability:** CSU

Historical examination of the genre of the literary magazine from the 18th century to the present, with an emphasis on the late 20th century. Also, after selecting and editing material for Palomar College's literary journal, *Bravura*, students will structure, format, produce, and distribute the magazine.

**ENG 150 Introduction to Linguistics (3)**

3 hours lecture

**Note:** Cross listed as ANTH 150

**Transfer acceptability:** CSU; UC

An introduction to the principles and practices of modern language study. Examines the origins and development of language, its social uses and implications, and its structure.

**ENG 197 English Topics (.5-4)**

Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture, laboratory, or lecture/laboratory may be scheduled by the department. Refer to Class Schedule.

**Note:** May be taken 4 times

**Transfer acceptability:** CSU; UC – Credit determined by UC upon review of course syllabus.

Topics in English. See Class Schedule for specific topic offered. Course title will designate subject covered.

**ENG 202 Critical Thinking and Composition (4)**

4 hours lecture

**Prerequisite:** A minimum grade of 'C' in ENG 100

**Note:** May not be taken for Credit/No Credit grading

**Transfer acceptability:** CSU; UC

Provides instruction and practice in methods of critical thinking and formal composition, emphasizing the following: awareness of language and its implications through rhetorical and semiotic analysis based on systematic consideration of language in context; awareness of principles of classical argument in light of the traditions of rational thought. Students will be required to engage in both traditional and current methods of research through the use of information technology.

**ENG 203 Critical Thinking and Composition Through Literature (4)**

4 hours lecture

**Prerequisite:** A minimum grade of 'C' in ENG 100

**Note:** May not be taken for Credit/No Credit grading

**Transfer acceptability:** CSU; UC

Practice in writing essays about literature with emphasis on critical thinking, reading, and writing skills; principles of inductive and deductive reasoning; the relationship of language to logic; analysis, criticism, and advocacy of ideas; methods of research; advanced elements of style and organization.

**ENG 205 Introduction to Literature (3)**

3 hours lecture

**Prerequisite:** Eligibility for ENG 100

**Transfer acceptability:** CSU; UC; CAN ENGL 4

An introduction to fiction, poetry, drama, and other genres in literary form. Students will read and discuss assigned selections from various literary genres and examine themes, language, forms, techniques, and other strategies that influence the production and reception of literature.

**ENG 210 Survey of British Literature I (3)**

3 hours lecture

**Prerequisite:** Eligibility for ENG 100

**Transfer acceptability:** CSU; UC; CAN ENGL 8; ENG 210+211=CAN ENGL SEQ B

A study of the significant texts in British literature from the Middle Ages to the Eighteenth Century; considers a variety of authors, literary genres and trends, as well as the historical and cultural contexts of the literary texts.

**ENG 211 Survey of British Literature II (3)**

3 hours lecture

**Prerequisite:** Eligibility for ENG 100

**Transfer acceptability:** CSU; UC; CAN ENGL 10, ENG 210+211=CAN ENGL SEQ B

A study of significant texts in British literature from the Romantic period to the present. Considers a variety of authors, literary genres and trends, as well as the historical and cultural contexts of the literary texts.

**ENG 215 Introduction to the British Novel (3)**

3 hours lecture

**Prerequisite:** Eligibility for ENG 100

**Transfer acceptability:** CSU; UC

A study of the British novel through reading such writers as Aphra Behn, Daniel Defoe, Laurence Sterne, Samuel Richardson, Fanny Burney, Jane Austen, Mary Shelley, Charlotte Bronte, Emily Bronte, Wilkie Collins, Charles Dickens, George Eliot, Thomas Hardy, Joseph Conrad, Virginia Woolf, James Joyce, Jean Rhys, Chinua Achebe, Salman Rushdie.

**ENG 220 Survey of World Literature I (3)**

3 hours lecture

**Prerequisite:** Eligibility for ENG 100

**Transfer acceptability:** CSU; UC

A survey of the major literature of Africa, the Americas, Asia and Europe from ancient times to about 1600. A comparative study of literary themes and expression will be pursued.

**ENG 221 Survey of World Literature II (3)**

3 hours lecture

**Prerequisite:** Eligibility for ENG 100

**Transfer acceptability:** CSU; UC

A survey of the major literatures of Europe, Asia, the Americas, Africa, and Australia from about 1600 to the present. A comparative study of literary themes and influences will be pursued.

**ENG 225 Literature of the United States I (3)**

3 hours lecture

**Prerequisite:** Eligibility for ENG 100

**Transfer acceptability:** CSU; UC; CAN ENGL 14

Significant texts written in the territories that would become the United States, from the pre-colonial period to the Civil War; considers a variety of literary genres and trends, with a focus on such issues as the interaction of texts and history, the expansion and politics of the literary canon, and the influence of the cultural contexts in which the literature of the United States is written and interpreted.

**ENG 226 Literature of the United States II (3)**

3 hours lecture

**Prerequisite:** Eligibility for ENG 100

**Transfer acceptability:** CSU; UC

Significant texts written in the United States from the Civil War to the present; considers a variety of literary genres and trends, with a focus on such issues as the interaction of texts and history, the expansion and politics of the literary canon, and the influence of the cultural contexts in which the literature of the United States is written and interpreted.

**ENG 230 Introduction to the American Novel (3)**

3 hours lecture

**Prerequisite:** Eligibility for ENG 100

**Transfer acceptability:** CSU; UC

A study of the development of the American novel through reading such writers as Nathaniel Hawthorne, Louisa May Alcott, Herman Melville, Mark Twain, Henry James, Elizabeth Stewart Phelps, Kate Chopin, William Faulkner, Ernest Hemingway, Nella Larsen, Bernard Malamud, Zora Neale Hurston, Willa Cather, Ralph Ellison, Thomas Pynchon, Toni Morrison, Maxine Hong Kingston, Louise Erdrich, and James Baldwin.

**ENG 240 Introduction to Classical Mythology (3)**

3 hours lecture

**Prerequisite:** Eligibility for ENG 100

**Transfer acceptability:** CSU; UC

A study of the meaning and function of myth in the classical literature of Ancient Greece and Rome. Read translations of representative epic, poetic, and dramatic

literature of Hesiod, Homer, Aeschylus, Sophocles, Euripides, Aristophanes, Vergil, and Ovid. An examination of the cultures which helped shape the literature and values with us today.

**ENG 245 Survey of Biblical Literature (3)**

3 hours lecture

**Prerequisite:** Eligibility for ENG 100

**Transfer acceptability:** CSU; UC

An introduction to the study of the Bible in English as an anthology of literary types and genres: stories, poetry, proverbs, gospels, parables, epistles, satire, and visionary literature.

**ENG 250 Introduction to Shakespeare (3)**

3 hours lecture

**Prerequisite:** Eligibility for ENG 100

**Transfer acceptability:** CSU; UC

Introduction to the life, times, background, poems, and plays of William Shakespeare.

**ENG 255 Literature and Ideas (3)**

3 hours lecture

**Prerequisite:** Eligibility for ENG 100

**Note:** Cross listed as PHIL 255; may be taken 2 times

**Transfer acceptability:** CSU; UC

An introduction to selected major philosophical ideas, questions, and attitudes in significant literature of the world, from the ancient world to the present. The course will trace treatment of a thematic idea through literature of particular times and cultures. Recommended for English and Philosophy majors, and for those interested in broadening their background in the humanities.

**ENG 260 Literature Through Film (3)**

3 hours lecture

**Prerequisite:** Eligibility for ENG 100

**Note:** May be taken 2 times

**Transfer acceptability:** CSU; UC – max credit, one course

Analysis of the expectations and conventions used in literature -- novels, short stories, dramas -- and how those expectations and conventions are affected when they are translated into film. Critical analysis of the various works and comparison/contrast of the different interpretations of these ideas will be stressed.

**ENG 265 Science Fiction (3)**

3 hour lecture

**Prerequisite:** Eligibility for ENG 100

**Note:** Graded only

**Transfer acceptability:** CSU; UC

An introduction to science fiction - its major authors and stories, themes, trends, and cultural impact.

**ENG 270 Popular Literature (3)**

3 hours lecture

**Prerequisite:** Eligibility for ENG 100

**Note:** Graded only. May be taken 2 times

**Transfer acceptability:** CSU; UC – max credit, one course

An introduction to one genre of popular literature such as science fiction, fantasy, detective fiction, war fiction, humor, or western literature using short stories and novels, and how these works are affected by the expectations, and conventions of the genre in which the author is writing.

**ENG 280 Women and Literature (3)**

3 hours lecture

**Prerequisite:** Eligibility for ENG 100

**Transfer acceptability:** CSU; UC

Examines from a multicultural perspective women's relationship to literature. Examines what it means to be a "woman" writer, exploring historical and cultural conditions that have shaped women's relationship to literature. Explores gender stereotypes in literature by and about women and analyzes the ways in which women writers engage with, resist, and/or subvert dominant ideas about gender in literature.

**ENG 290 Comic Books as Literature (3)**

3 hours lecture

**Prerequisite:** Eligibility for ENG 100

**Transfer acceptability:** CSU; UC

An analysis of the comic book in terms of its unique poetics (the complicated interplay of word and image); the themes that are suggested in various works; the history and development of the form and its subgenres; and the expectations of comic book readers. Examines the influence of history, culture, and economics on comic book artists and writers. Explores definitions of "literature," how these definitions apply to comic books, and the tensions that arise from such applications.

**ENG 295 Directed Study in Literature (1,2,3)**

3, 6, or 9 hours laboratory

**Prerequisite:** Eligibility for ENG 100

**Note:** May be taken 2 times

**Transfer acceptability:** CSU; UC – Credit determined by UC upon review of course syllabus.

Independent study for students who have demonstrated skills and/or proficiencies in English subjects and have the initiative to work independently on projects or research outside the context of regularly scheduled classes. Students will work under the personal supervision of an instructor.

## English as a Second Language (ESL)

Contact the English as a Second Language Department for further information, (760) 744-1150, ext. 2272

Any student wishing to earn an A.A. degree must complete ENG 100 with a grade of 'C' or better.

Students whose first language is not English are advised to participate in an English placement process given by the English as a Second Language Department before enrolling in any English or English as a Second Language class. The assessment process will determine which level is appropriate for the student.

### COURSE OFFERINGS

Courses numbered under 50 are non-degree courses.

Courses numbered under 100 are not intended for transfer credit.

The following courses are for students whose first language is not English.

**ESL I Beginning ESL I (1-4)**

3 to 12 hours lecture/laboratory

**Prerequisite:** Eligibility established through the English as a Second Language placement process.

Listening, speaking, reading, and writing skills for non native speakers of English at the low-beginning level.

**ESL 2 Beginning ESL II (1-4)**

3 to 12 hours lecture/laboratory

**Prerequisite:** A minimum grade of 'C' in ESL I or eligibility determined through the English as a Second Language placement process.

Listening, speaking, reading, and writing skills for non-native speakers of English at the mid-beginning level.

**ESL 3 Beginning ESL III (1-4)**

3 to 12 hours lecture/laboratory

**Prerequisite:** A minimum grade of 'C' in ESL 2 or eligibility determined through the English as a Second Language placement process.

Listening, speaking, reading, and writing skills for non-native speakers of English at the high-beginning level.

- ESL 9 English Pronunciation I (3)**  
3 hours lecture  
Development of students' ability to identify and replicate English intonation, stress patterns, and certain common word combinations as they are pronounced in informal speech.
- ESL 10 English Pronunciation II (3)**  
3 hours lecture  
Identifies standard spoken American English intonation, stress and rhythm sounds. Provides practice to retrain the speech organs to produce those sounds. Emphasis on self correction of speech problems.
- ESL 15 Grammar Skills for ESL Writers I (3)**  
3 hours lecture  
Instruction in editing of written material by applying conventions of standard written English.
- ESL 16 Grammar Skills for ESL Writers II (3)**  
3 hours lecture  
Instruction in editing of written material by applying conventions of standard written English.
- ESL 20 Academic Speaking for ESL (3)**  
3 hours lecture  
**Recommended preparation:** A minimum grade of 'C' in ESL 3 or eligibility determined through the English as a Second Language placement process.  
Develops speaking skills necessary for non-native speakers of English to have successful oral communication in the college environment. This class emphasizes linguistic and interpersonal skills in order for participation in discussions and performance of tasks in personal, academic, and formal or informal situations. Vocabulary, conversation strategies, and presentation techniques introduced within interesting and meaningful contexts.
- ESL 30.1 Computer Literacy for ESL I (2)**  
4 hours lecture/laboratory  
Development of reading and writing skills in English through computer technology, focusing on vocabulary specific to using computers. This class focuses on basic word processing using Microsoft Word. Includes procedures needed to complete reading and writing assignments and other projects.
- ESL 30.2 Computer Literacy for ESL II (2)**  
4 hours lecture/laboratory  
**Prerequisite:** A minimum grade of 'C' in ESL 30.1  
Development of reading and writing skills in English through computer technology, focusing on vocabulary specific to using computers. This class focuses on electronic spreadsheet and presentation software using Microsoft Excel and PowerPoint. Includes procedures needed to complete reading and writing assignments and other projects.
- ESL 34 Intermediate ESL I (1-4)**  
3 to 12 hours lecture/laboratory  
**Prerequisite:** A minimum grade of 'C' in ESL 3 or eligibility determined through the English as a Second Language placement process.  
Listening, speaking, reading, and writing skills for non native speakers of English at the low-intermediate level.
- ESL 35 Intermediate ESL II (1-4)**  
3 to 12 hours lecture/laboratory  
**Prerequisite:** A minimum grade of 'C' in ESL 34 or eligibility determined through the English as a Second Language placement process.  
Listening, speaking, reading, and writing skills for non native speakers of English at the mid-intermediate level.
- ESL 36 Intermediate ESL III (1-4)**  
3 to 12 hours lecture/laboratory  
**Prerequisite:** A minimum grade of 'C' in ESL 35 or eligibility determined through the English as a Second Language placement process.  
Listening, speaking, reading, and writing skills for non native speakers of English at the high-intermediate level.
- ESL 40 Introduction to Academic Reading and Writing (2)**  
2 hours lecture  
A multilevel reading and writing course designed to help students improve their reading and writing skills. This course will provide a review of grammar, paragraph organization and development, and the conventions of academic writing. It will also address reading strategies such as using textual clues to aid comprehension, finding a balance between speed and accuracy, and vocabulary building. Offered in the summer session only.
- ESL 97 English as a Second Language Topics (.5-5)**  
Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture, laboratory, or lecture/laboratory may be scheduled by the department. Refer to Class Schedule.  
**Note:** May be taken 4 times  
Topics in English as a Second Language. See Class Schedule for specific topic covered. Course title will designate subject covered.
- ESL 98.1 Vocational ESL I (1-4)**  
3 to 12 hours laboratory  
Beginning level English as a Second Language instruction in preparation for a vocational program. Self-paced modules provide an introduction to complementary language and academic skills necessary to succeed in a vocational program. Includes reading, writing, speaking, listening, and basic computer literacy skills.
- ESL 98.2 Vocational ESL II (1-4)**  
3 to 12 hours laboratory  
**Prerequisite:** ESL 98.1  
Intermediate English as a Second Language instruction in preparation for a vocational program. Continued self-paced intermediate instruction in complementary language and academic skills necessary to succeed in a vocational program. Includes reading, writing, speaking, listening, and intermediate computer literacy skills.
- ESL 98.3 Vocational ESL III (1-4)**  
3 to 12 hours laboratory  
**Prerequisite:** ESL 98.2  
Advanced English as a Second Language instruction in preparation for a vocational program. Provides advanced complementary instruction in language and academic skills necessary to succeed in a vocational program through self-paced modules. Includes reading, writing, speaking, listening, and advanced computer literacy skills. For students who are completing their Vocational ESL program of studies.
- ESL 101 Written Communication I (5)**  
5 hours lecture  
**Prerequisite:** Eligibility determined through the English as a Second Language placement process  
**Transfer acceptability:** CSU  
A review of word level and sentence level grammar, paragraph organization, paragraph development, development of the five paragraph essay and appropriate vocabulary for academic writing. Emphasizes writing as a process; develops analytical skills and critical thinking.
- ESL 102 Written Communication II (5)**  
5 hours lecture  
**Prerequisite:** A minimum grade of 'C' in ESL 101 or eligibility determined through the English as a Second Language placement process  
**Transfer acceptability:** CSU; UC – ESL 102 and 103 combined: maximum credit, 8 units  
A review of sentence level grammar, paragraph organization, development of the five paragraph essay, and appropriate vocabulary for academic writing. Introduces writing as a response to published materials which cultivate the affective and intellectual abilities of the students. Emphasizes writing as a process; develops analytical skills and critical thinking.
- ESL 103 Written Communication III (5)**  
5 hours lecture  
**Prerequisite:** A minimum grade of 'C' in ESL 102 or eligibility determined

through the English as a Second Language placement process.

**Transfer acceptability:** CSU; UC – ESL 102 and 103 combined: maximum credit, 8 units

Expansion of the basic five paragraph essay through the development of detailed, specific, and appropriate support. Further develops the students' abilities to read, analyze, interpret, and respond both objectively and subjectively to published materials that are linguistically, conceptually, and culturally challenging. Emphasizes writing as a process.

**ESL 130 Academic Reading for ESL I (3)**  
3 hours lecture

**Transfer acceptability:** CSU

An introduction to reading skills necessary for understanding academic writing. Emphasis is on vocabulary development, analysis of complex grammatical constructions at the sentence level to improve comprehension, paraphrasing, and summary writing. Additional focus is on the improvement of reading speed.

**ESL 131 Academic Reading for ESL II (3)**  
3 hours lecture

**Transfer acceptability:** CSU

Reading skills for understanding the complex nature of the language and concepts presented in college textbooks. Emphasis is on the organization of textbook writing, the signals which help the student to analyze and comprehend each part of a chapter, and the patterns of writing which students must recognize such as cause and effect, comparison and contrast, exemplification and process which are most common in college textbook material.

**Entertainment Technology (ENTT)**

Contact the Performing Arts Department for further information, (760) 744-1150, ext. 2316

Associate in Arts degree requirements, Certificate of Achievement requirements, and Certificate of Proficiency requirements are listed in Section 6 (green pages) of the catalog.

**PROGRAM OF STUDY**

**Entertainment Technology**

**CERTIFICATE OF PROFICIENCY**

An overview of the live entertainment technology industry, including: working methods, processes, equipment and facilities for theatre, opera, dance, television, cinema, concert productions, theme parks, themed-retail, cruise ship venues, and corporate special events.

Program Requirements	Units
ENTT/TA 105 Introduction to Technical Theatre	2.5
ENTT/TA 107 Lighting for Stage and Television	3
ENTT/TA 108 Stagecraft and Scene Design for Theatre and TV	3
ENTT/RTV 120 Basic Television Production	3
ENTT/RTV 130 Radio Production	3
ENTT/ RTV 294B or TA 197D Television Internships/Production Stage Crew Workshop	1
<b>TOTAL UNITS</b>	<b>15.5</b>

**COURSE OFFERINGS**

**ENTT 100 Introduction to Entertainment Technology (1)**  
1 hour lecture

**Transfer acceptability:** CSU

An introduction to the live entertainment technology industry, including: working methods, processes, equipment and facilities for theatre, opera, dance, concert productions, theme parks, themed retail, cruise ship venues, and corporate special

events. Related current events and career opportunities will be discussed. Attendance at several of the type of events listed above is required.

**ENTT 103 Introduction to Audio-Visual Systems (3)**  
6 hours lecture/laboratory

**Note:** Cross listed as RTV 103

Provides a theoretical and practical foundation in temporary and permanent video and audio systems technology for entertainment applications such as theatre, corporate events, hotel/ballroom A/V work, theme parks, museums and other related applications.

**ENTT 105 Introduction to Technical Theatre (2.5)**  
5 hours lecture/laboratory

**Note:** Cross listed as TA 105

**Transfer acceptability:** CSU; UC

A general survey of technical theatre including stagecraft, lighting, sound design, costuming, make up, production organization, business management, and promotion. Course will include practical skills in all areas.

**ENTT 107 Lighting for Stage and Television (3)**  
2 hours lecture-3 hours laboratory

**Note:** Cross listed as TA 107

**Prerequisite:** ENTT 105/TA 105

**Transfer acceptability:** CSU; UC

Techniques, theories, and procedures necessary to develop lighting and lighting effects integrated into film, television, and theatre productions. Practical experience in college productions.

**ENTT 108 Stagecraft and Scene Design for Theatre and Television (3)**  
2 hours lecture-3 hours laboratory

**Note:** Cross listed as TA 108

**Prerequisite:** ENTT 105/TA 105

**Transfer acceptability:** CSU; UC

Technical practices and organization of production for theatre, film, and television. Practice in drafting, designing, and construction of scenery for college productions.

**ENTT 112 Entertainment Audio Production (3)**  
2 hours lecture-3 hours laboratory

**Note:** Cross listed as TA 112

**Transfer acceptability:** CSU

Audio applications and technology for entertainment based uses. To understand set up, operation, troubleshooting techniques with audio signal chain.

**ENTT 120 Basic Television Production (3)**  
6 hours lecture/laboratory

**Note:** Cross listed as RTV 120

**Transfer acceptability:** CSU

The terminology, practices, and aesthetic considerations of visual and sound productions. Principles of producing, staging, shot composition, directing, blocking, graphics, studio techniques, and lighting for television.

**ENTT 130 Radio Production (3)**  
6 hours lecture/laboratory

**Note:** Cross listed as RTV 130

**Transfer acceptability:** CSU

Techniques and theories of audio production in the preparation of radio programs. Use of audio mixing and recording equipment, editing and dubbing, microphone techniques and program construction. Several programs produced by the student will be broadcast on radio station KKSM.

**ENTT 294B Television Internships/Production (1,2,3)**  
3, 6, or 9 hours laboratory

**Note:** Cross listed as RTV 294B; May be taken 4 times

**Transfer acceptability:** CSU

Work on advanced television production including individual research, work on college produced programs, or internships at local broadcast stations, cable companies, and other communications facilities.

## Family and Consumer Sciences (FCS)

Contact the Design and Consumer Education Department for further information, (760) 744-1150, ext. 2349. For transfer information, consult a Palomar College counselor.

Associate in Arts degree requirements, Certificate of Achievement requirements, and Certificate of Proficiency requirements are listed in Section 6 (green pages) of the catalog.

### PROGRAM OF STUDY

#### Family and Consumer Sciences-General

For students desiring to improve their skills as home managers or to enter careers in social services or related fields requiring knowledge of family management skills.

Students should be aware that not all Family and Consumer Sciences, Fashion, and Interior Design courses are offered every semester. See Class Schedule or Department Chairperson for additional information.

### A.A. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT

Program Requirements		Units
FCS 101	Human Systems Management	3
FCS 105	Family Dynamics	3
FCS/BUS 136	Personal Finance	3
FCS/HE 165	Fundamentals of Nutrition	3
FASH 110	Textiles	3
FASH 135	Basic Sewing Construction	3
ID 100	Interior Design	3
CHDV 100 or PSYC 110	Child Development Developmental Psychology – Child Through Adult	3
<b>TOTAL UNITS</b>		<b>24</b>

Recommended Electives: It is recommended that candidates for the certificate and transfer students take one or more of the following courses: FCS 197, 295; FASH 100, 105, 136; ID 105, 115; ART 120; CHEM 100; CHDV 145; CE 100; PSYC 100; SOC 100; SPCH 100

Students planning to transfer to San Diego State University should seek counseling from the director of the Family and Consumer Sciences program.

### COURSE OFFERINGS

Courses numbered under 50 are non-degree courses.  
Courses numbered under 100 are not intended for transfer credit.

#### FCS 20 Residential Services Specialist I (3)

3 hours lecture

Prepares students for working in or operating their own residential care home for the developmentally disabled. When taken along with FCS 21, fulfills the requirements for the Residential Services Specialist Certificate which is required of home care operators by the State Department of Developmental Services.

#### FCS 21 Residential Services Specialist II (3)

3 hours lecture

Prepares students for working in or operating their own residential care home for the developmentally disabled. When taken along with FCS 20, fulfills the requirements for the Residential Services Specialist Certificate which is required of care home operators by the State Department of Developmental Services.

#### FCS 101 Human Systems Management (3)

3 hours lecture

**Transfer acceptability:** CSU

Principles of managing human systems through the techniques of goal setting, decision making, communication, and time and energy structuring. Emphasizes problem solving skills transferable to management of education, residence, or work environments.

#### FCS 105 Family Dynamics (3)

3 hours lecture

**Transfer acceptability:** CSU

Explores the elements which lead to successful adjustment in family living. Dynamics of love, communication, and sexuality are examined as part of the developmental process of family life.

#### FCS 110 Microbiology and Foods (3)

2 hours lecture - 2 hours lecture/laboratory

**Note:** Cross listed as MICR 110

**Transfer acceptability:** CSU

Introduction to the principles of microbiology with an emphasis on foodborne pathogens. Students will explore biological factors and controls relating to reproduction of microorganisms and the effects on public health. This course does not meet microbiology requirement for pre-health students.

#### FCS 136 Personal Finance (3)

3 hours lecture

**Note:** Cross listed as BUS 136

**Transfer acceptability:** CSU

A study of the effective management of personal and family resources. Budgeting, buying of goods and services, banking, credit, taxation, investing, insurance, home ownership, estate planning, and consumer protection.

#### FCS 150 Cultural Nutrition (3)

3 hours lecture

**Transfer acceptability:** CSU

Regional, ethnic, cultural, religious, historical, and social influences on food patterns. Influence of socio-economic class, gender, and age on diet, health, and disease.

#### FCS 165 Fundamentals of Nutrition (3)

3 hours lecture

**Note:** Cross listed as HE 165

**Transfer acceptability:** CSU; UC – FCS 165, FCS 185, BIOL 185, HE 165 combined: maximum credit, one course; CAN FCS 2

The study of how food nourishes the body. Investigation of diet fads and fallacies, eating for fitness, and planning meals for optimum health throughout the life cycle.

#### FCS 170 Nutrition: Eating Disorders and Obesity (3)

3 hours lecture

**Transfer acceptability:** CSU

Review of etiology, incidence, socio economic influences, pathogenesis, and treatments. Techniques studied include modification of diet, activity, and behavior. Of interest to those needing vocational information for work with anorexics, bulimics, and the obese.

#### FCS 185 Science of Human Nutrition (3)

3 hours lecture

**Note:** Cross listed as BIOL 185

**Transfer acceptability:** CSU; UC – FCS 165, FCS 185, BIOL 185, HE 165 combined: maximum credit, one course

Science of food, nutrients, and other substances therein; processes by which the organism ingests, digests, absorbs, transports, utilizes, and excretes food substances. Emphasis on biological, chemical, and physiological implications to human nutrition.

**FCS 197 Family and Consumer Sciences Workshop (.5-3)**  
 Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture, laboratory, or lecture/laboratory may be scheduled by the department. Refer to Class Schedule.  
**Note:** May be taken 3 times  
**Transfer acceptability:** CSU  
 Materials relative to the field of Family and Consumer Sciences.

**FCS 295 Directed Study in Family and Consumer Sciences (1,2,3)**  
 3, 6, or 9 hours laboratory  
**Prerequisite:** Approval of project or research by department chairperson/director  
**Note:** May be taken 4 times  
**Transfer acceptability:** CSU  
 Independent study for students who have demonstrated skills and/or proficiencies in Family and Consumer Sciences subjects and have the initiative to work independently on projects or research outside the context of regularly scheduled classes. Students will work under the personal supervision of an instructor.

**Fashion (FASH)**

Contact the Design and Consumer Education Department for further information, (760) 744-1150, ext. 2349. For transfer information, consult a Palomar College counselor.

Associate in Arts degree requirements, Certificate of Achievement requirements, and Certificate of Proficiency requirements are listed in Section 6 (green pages) of the catalog.

**PROGRAMS OF STUDY**

**Fashion Design/Entry-Level**

This certificate is intended to prepare students for entry-level positions in fashion design. It is intended to be completed in one year of full-time attendance at Palomar College. Employment might include seamstress, alterationist, assistant designer, and sample cutter.

**CERTIFICATE OF ACHIEVEMENT**

Program Requirements	Units
FASH 100 Fashion Industry	3
FASH 105 Fashion Analysis and Clothing Selection	3
FASH 110 Textiles	3
FASH 135 Basic Sewing Construction	3
FASH 136 Advanced Sewing Construction	3
FASH 139 Pattern Making/Fashion Design	3
FASH 145 Fashion Illustration and Presentation	3
FASH 148 Digital Design for Fashion	3
FASH 195 Field Studies in Fashion	2
CE 150 Internship	2-3
<b>TOTAL UNITS</b>	<b>28-29</b>

Recommended Elective: FASH 146

**Fashion Design/Technical**

Courses required for employment in the fashion industry; specifically in pattern making, sample work, fashion design, and illustration.

Students should be aware that not all Fashion courses are offered every semester. See Class Schedule or Department Chairperson for additional information.

**A.A. DEGREE MAJOR**

Program Requirements	Units
BMGT 105 or Small Business Management	3
BUS 155 Marketing	

FASH 100 Fashion Industry	3
FASH 105 Fashion Analysis/Clothing Selection	3
FASH 110 Textiles	3
FASH 130 History of Fashion/Costume	3
FASH 135 Basic Sewing Construction	3
FASH 136 Advanced Sewing Construction	3
FASH 139 Pattern Making/Fashion Design	3
FASH 141 Adv Patternmaking/Fashion Design	3
FASH 145 Fashion Illustration/Presentation	3
FASH 146 Computer Aided Design (CAD) for Fashion	3
FASH 148 Digital Design for Fashion	3
FASH 165 Fashion Laboratory	.5,1
FASH 195 Field Studies in Fashion	2
CE 150 Internship	2-3
<b>TOTAL UNITS</b>	<b>40.5 - 42</b>

Recommended Electives: FASH 125/BUS 145, FASH 132, 147, 170

**Fashion Merchandising/Entry-Level**

This certificate is intended to prepare students for entry-level positions in fashion merchandising, such as sales associate, display stylist, and assistant manufacturer's representative. It is intended to be completed in one year of full-time attendance at Palomar College.

**CERTIFICATE OF ACHIEVEMENT**

Program Requirements	Units
FASH 100 Fashion Industry	3
FASH 105 Fashion Analysis/Clothing Selection	3
FASH 110 Textiles	3
FASH 115 Visual Merchandising I	3
FASH 125/	
BUS 145 Retailing/Promotion	3
FASH 148 Digital Design for Fashion	3
FASH 195 Field Studies in Fashion	2
CE 150 Internship	2-3
<b>TOTAL UNITS</b>	<b>22-23</b>

Recommended Electives: FASH 130, 155

**Fashion Merchandising Sales Associate**

This certificate is intended to prepare students for immediate employment in the fashion industry as a sales associate. It is intended to be completed in one semester.

**CERTIFICATE OF PROFICIENCY**

Program Requirements	Units
FASH 100 Fashion Industry	3
FASH 105 Fashion Analysis/Clothing Selection	3
FASH 115 Visual Merchandising I	3
<b>TOTAL UNITS</b>	<b>9</b>

**Fashion Merchandising/Technical**

The Fashion Merchandising A.A. degree program provides students with an option for a career or the requisite foundation for transfer to a four-year college or university. Careers might include assistant buyer, assistant department manager, small store owner, visual merchandiser, advertising consultant, fashion coordinator, promotion coordinator, sales associate, or manufacturer's sales representative.

Students should be aware that not all Fashion courses are offered every semester. See Class Schedule or Department Chairperson for additional information.

**A.A. DEGREE MAJOR****Program Requirements**

	<b>Units</b>
BMGT 105 or Small Business Management	3
BUS 155 Marketing	3
FASH 100 Fashion Industry	3
FASH 105 Fashion Analysis/Clothing Selection	3
FASH 110 Textiles	3
FASH 115 Visual Merchandising I	3
FASH 120 Fashion Buying/Management	3
FASH 125/ BUS 145 Retailing/Promotion	3
FASH 126 Fashion Show Promotion	1
FASH 130 History of Fashion/Costume	3
FASH 145 Fashion Illustration and Presentation	3
FASH 148 Digital Design for Fashion	3
FASH 195 Field Studies in Fashion	2
CE 150 Internship	2-3

**TOTAL UNITS** **35-36**

Recommended Electives: FASH 116, 132, 155; BUS 155

**COURSE OFFERINGS**

Courses numbered under 100 are not intended for transfer credit.

<p><b>FASH 80 Serger Sewing</b> <span style="float: right;">(.5)</span>  <i>1 hour lecture/laboratory</i>  <b>Recommended preparation:</b> FASH 135  <b>Note:</b> May be taken 2 times            Basic serger (overlock) sewing machine operation for construction and embellishment.</p> <p><b>FASH 81 Serger Sewing II</b> <span style="float: right;">(.5)</span>  <i>1 hour lecture/laboratory</i>  <b>Recommended preparation:</b> FASH 135  <b>Note:</b> May be taken 2 times            Serger (overlock) sewing machine operation for construction and embellishment beyond the introductory level.</p> <p><b>FASH 90 Design Collection</b> <span style="float: right;">(1)</span>  <i>2 hours lecture/laboratory</i>  <b>Recommended preparation:</b> At least one of the following courses: FASH 135, 136, 139, 145  <b>Note:</b> May be taken 3 times            Lab course for fashion show line designers in any clothing category of women's, men's, teen's, and children's wear.</p> <p><b>FASH 91 Pattern Grading</b> <span style="float: right;">(.5)</span>  <i>1 hour lecture/laboratory</i>  <b>Recommended preparation:</b> FASH 135, 139  <b>Note:</b> May be taken 2 times            Pattern grading for industry professionals for the purpose of increasing or decreasing sample-size production patterns to make up a complete size range.</p> <p><b>FASH 100 Fashion Industry</b> <span style="float: right;">(3)</span>  <i>3 hours lecture</i>  <b>Transfer acceptability:</b> CSU            A study of the background and technology of the clothing industry. Includes contemporary problems of production and distribution; emphasis is on career options in the fashion industry.</p> <p><b>FASH 105 Fashion Analysis and Clothing Selection</b> <span style="float: right;">(3)</span>  <i>3 hours lecture</i>  <b>Transfer acceptability:</b> CSU; CAN FCS 20            Examines fashion as it relates to wardrobe planning, coordination, and standards of quality garment construction.</p>	<p><b>FASH 110 Textiles</b> <span style="float: right;">(3)</span>  <i>3 hours lecture / 1 hour laboratory</i>  <b>Transfer acceptability:</b> CSU; CAN FCS 6            Fibers, yarn, fabric construction, and finishes as related to selection, use, and care.</p> <p><b>FASH 115 Visual Merchandising I</b> <span style="float: right;">(3)</span>  <i>3 hours lecture / 1 hour laboratory</i>  <b>Transfer acceptability:</b> CSU            Visual merchandise presentation including window and interior displays, elements of design, principles of design, fixtures, lighting, and other display materials.</p> <p><b>FASH 116 Visual Merchandising II</b> <span style="float: right;">(3)</span>  <i>3 hours lecture-1 hour laboratory</i>  <b>Transfer acceptability:</b> CSU            Advanced visual design and application. Hands on experience in merchandise presentation and display; basic drafting techniques and drafting tools related to store planning and visual merchandising.</p> <p><b>FASH 120 Fashion Buying/Management</b> <span style="float: right;">(3)</span>  <i>3 hours lecture</i>  <b>Transfer acceptability:</b> CSU            Principles of fashion buying utilizing practical applications and case studies. Topics covered include merchandise planning and selection, resource relations, legal trade regulations, pricing, and merchandise management and control.</p> <p><b>FASH 125 Retailing/Promotion</b> <span style="float: right;">(3)</span>  <i>3 hours lecture</i>  <b>Note:</b> Cross listed as BUS 145  <b>Transfer acceptability:</b> CSU            Principles and techniques of retailing, promotion, and advertising pertinent to retail policies and procedures. Includes psychological aspect of retailing. Working foundation for those looking forward to employment in this area.</p> <p><b>FASH 126 Fashion Show Presentation</b> <span style="float: right;">(1)</span>  <i>2 hours lecture/laboratory</i>  <b>Note:</b> May be taken 2 times  <b>Transfer acceptability:</b> CSU            Applied study and practical application of fashion show and special event production and promotional skills. Strategies and techniques studied include organizing, advertising, staging, timing, and coordinating models and their clothing and accessories. Produce the Fashion Merchandising/Fashion Design program's annual fashion show.</p> <p><b>FASH 130 History of Fashion/Costume</b> <span style="float: right;">(3)</span>  <i>3 hours lecture</i>  <b>Transfer acceptability:</b> CSU            Styles of dress from the Paleolithic period to the present as depicted in art forms and other media. Focuses on Western European costume.</p> <p><b>FASH 131 Elementary Stage Costume and Make Up</b> <span style="float: right;">(3)</span>  <i>2 hours lecture 3 hours laboratory</i>  <b>Transfer acceptability:</b> CSU            Basic theories, techniques, and procedures of costume production and make up application for stage, film, and television. Practical training in college productions.</p> <p><b>FASH 132 Costume and Culture</b> <span style="float: right;">(3)</span>  <i>3 hours lecture</i>  <b>Transfer acceptability:</b> CSU; UC            Patterns of dress and human adornment of three cultures: African, Asian/Pacific Islanders and the Americas. Socio-cultural developments in dress. Clothing images and meaning in a contemporary multicultural American society.</p> <p><b>FASH 135 Basic Sewing Construction</b> <span style="float: right;">(3)</span>  <i>6 hours lecture/laboratory</i>  <b>Note:</b> May be taken 2 times  <b>Transfer acceptability:</b> CSU            Traditional construction techniques. Quality garments will be produced utilizing new speed techniques as well as hand detailing.</p>
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- FASH 136 Advanced Sewing Construction** (3)  
6 hours lecture/laboratory  
**Recommended preparation:** FASH 135  
**Note:** May be taken 2 times  
**Transfer acceptability:** CSU  
Sewing construction techniques beyond basic level, with increased difficulty in pattern assembly.
- FASH 137 Tailoring** (3)  
6 hours lecture/laboratory  
**Recommended preparation:** FASH 135  
**Note:** May be taken 2 times  
**Transfer acceptability:** CSU  
Clothing principles emphasizing techniques in handling difficult fabrics. Principles of tailoring; planning and construction of suits and coats.
- FASH 139 Pattern Making/Fashion Design** (3)  
6 hours lecture/laboratory  
**Recommended preparation:** FASH 135  
**Note:** May be taken 2 times  
**Transfer acceptability:** CSU  
Pattern making through the flat pattern design method. Attention is given to design analysis and interpretation of design; application of design method in the development, presentation, and construction of original garments.
- FASH 141 Advanced Pattern Making/Fashion Design** (3)  
6 hours lecture/laboratory  
**Recommended preparation:** FASH 135 and FASH 139  
**Note:** May be taken 4 times  
**Transfer acceptability:** CSU  
Advanced design skills for the fashion industry. Examination of one method of pattern development: draping. Creation of patterns to drape and fit on a dress-maker's form.
- FASH 145 Fashion Illustration and Presentation** (3)  
3 hours lecture 1 hour laboratory  
**Transfer acceptability:** CSU  
Fundamentals in drawing of fashion figures and in illustration of fashion garments. Development of individual skills and style in graphic presentation.
- FASH 146 Computer Aided Design (CAD) for Fashion** (3)  
6 hours lecture/laboratory  
**Note:** May be taken 2 times  
**Transfer acceptability:** CSU  
An introduction to computer aided pattern making for fashion using CAD technology. Hands-on experience with CAD technology to include the following operations: preparing and editing patterns using a digitizing tablet or mouse, storage and retrieval of patterns, and production of fashion industry quality patterns on a plotter.
- FASH 147 Advanced Computer Aided Design (CAD) for Fashion** (3)  
6 hours lecture/laboratory  
**Prerequisite:** FASH 146  
**Note:** May be taken 2 times  
**Transfer acceptability:** CSU  
Advanced theory and hands-on operation of CAD systems for fashion pattern making including pattern making blocks, grading, and marker making. Emphasis is placed on productivity and manufacturability for the fashion design industry.
- FASH 148 Digital Design for Fashion** (3)  
6 hours lecture/laboratory  
**Note:** May be taken 2 times  
**Transfer acceptability:** CSU  
Design and illustrate fashion sketches, storyboards, and patterns using Adobe Illustrator and Adobe Photoshop. Development of individual skills and style in graphic presentations.
- FASH 155 World of Fashion** (2,3)  
4 or 6 hours lecture/laboratory  
**Note:** Fee charged; may be taken 4 times  
**Transfer acceptability:** CSU  
Extended field studies in textiles, design, manufacturing, forecasting, and retail practices as they apply to the national and international fashion industry. Emphasis upon field observation and examination of the fashion trends as they interrelate with the social, political, psychological, economic, and historical influences to create the fashion ambience. Geographical locations may vary.
- FASH 165 Fashion Laboratory** (.5-1)  
1½ or 3 hours laboratory  
**Note:** Credit/No Credit grading only; may be taken 4 times  
**Transfer acceptability:** CSU  
Enhancement of skills by supervised practice and active participatory experience in individual study. Content to be determined by the need of the student in agreement and under observation and direction of the instructor.
- FASH 170 Introduction to Fabric Design/Painting** (3)  
6 hours lecture/laboratory  
**Transfer acceptability:** CSU  
Traditional and contemporary methods in the application of fabric dyes and paints using fundamental design principles for textiles and clothing.
- FASH 195 Field Studies in Fashion** (2)  
4 hours lecture/laboratory  
**Note:** May be taken 2 times  
**Transfer acceptability:** CSU  
Fashion industry on site: process of designing, manufacturing, marketing, and merchandising of fashion apparel and related accessories.
- FASH 196A Special Problems in Computer Aided Pattern Drafting** (1,2,3)  
3, 6, 9 hours laboratory  
**Note:** May be taken 4 times  
**Transfer acceptability:** CSU  
Advanced research project using AutoCAD and BetaCAD software. Content to be determined by the need of the student under signed contract with the instructor.
- FASH 197A Fashion Merchandising Workshop** (.5-3)  
Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture, laboratory, or lecture/laboratory may be scheduled by the department. Refer to Class Schedule.  
**Note:** May be taken 4 times  
**Transfer acceptability:** CSU  
Covers areas of the fashion merchandising industry which are rapidly changing or require current short term specific training.
- FASH 197B Fashion Manufacturing Workshop** (.5-3)  
Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture, laboratory, or lecture/laboratory may be scheduled by the department. Refer to Class Schedule.  
**Note:** May be taken 4 times  
**Transfer acceptability:** CSU  
Covers areas of the fashion manufacturing industry which are rapidly changing or require current short term specific training.
- FASH 197C Fashion Design Workshop** (.5-3)  
Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture, laboratory, or lecture/laboratory may be scheduled by the department. Refer to Class Schedule.  
**Note:** May be taken 4 times  
**Transfer acceptability:** CSU  
Covers areas of the fashion design industry which are rapidly changing or require current short term specific training.

**FASH 295 Directed Study in Fashion (1,2,3)**  
 3, 6, or 9 hours laboratory  
**Prerequisite:** Approval of project or research by department chairperson/director

**Note:** May be taken 4 times

**Transfer acceptability:** CSU

Independent study for students who have demonstrated skills and/or proficiencies in Fashion subjects and have the initiative to work independently on projects or research outside the context of regularly scheduled classes. Students will work under the personal supervision of an instructor.

## Filipino

See Tagalog

## Fire Technology (FIRE)

Contact Public Safety Programs for further information, (760) 744-1150, ext. 1722

Associate in Arts degree requirements, Certificate of Achievement requirements, and Certificate of Proficiency requirements are listed in Section 6 (green pages) of the catalog.

### PROGRAMS OF STUDY

### Fire Technology - Emergency Management

Prepares student for career in Emergency Management.

#### A.A. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT\*

Program Requirements		Units
FIRE 100	Fire Protection Organization	3
FIRE 115	Hazardous Materials I	3
FIRE 120	Building Construction for Fire Protection	3
FIRE 131	Emergency Preparedness	3
FIRE 132	Fundamentals of Emergency Management	3
FIRE 133	Disaster Mitigation	3
<b>Electives (Select 12 units)</b>		
FIRE 51	Fire Academy Preparation	2
FIRE 71	Trench Rescue	.5
FIRE 72	Swiftwater Rescue	.5
FIRE 98	Fire Service Skills	.5-5
FIRE 105	Fire Hydraulics	3
FIRE 118	Fire Prevention Technology	4
FIRE 125	Fire Apparatus and Equipment	3
FIRE 130	Fire Protection Equipment and Systems	3
FIRE 145	Fire Fighting Tactics and Strategy	3
FIRE 151	Fire Fighter I Academy	18
FIRE 152	Driver Operator Academy	4.5
FIRE 160	Wildland Fire Control I	3
FIRE 165	Fundamentals of Fire Protection Chemistry	3
FIRE 168	Volunteer Fire Fighter Academy	4
FIRE 175	Fire Command IA	2
FIRE 176	Fire Command IB	2
FIRE 180	Fire Prevention IA	2
FIRE 181	Fire Prevention IB	2
FIRE 185	Fire Management I	2
FIRE 190	Fire Investigation IA	2
FIRE 193	Fire Instructor IA	2
FIRE 194	Fire Instructor IB	2
FIRE 197A	Fire Technology General Topics	.5-5
FIRE 197B	Fire Technology Command Topics	.5-5
FIRE 197C	Fire Technology Field Topics	.5-5
<b>TOTAL UNITS</b>		<b>30</b>

**\*Fire Technology – Emergency Management A.A. Degree Major or Certificate of Achievement pending approval by Chancellor’s Office at time of catalog publication.**

### Fire Technology - General

Prepares students for a career in fire suppression, fire prevention and/or fire protection.

The following courses may be substituted: CHEM 100 will substitute for FIRE 115; PHYS 102 or 120 or PHSC 100 will substitute for FIRE 165.

#### A.A. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT

Program Requirements		Units
FIRE 100	Fire Protection Organization	3
FIRE 118	Fire Prevention Technology	4
FIRE 120	Building Construction for Fire Protection	3
FIRE 130	Fire Protection Equipment and Systems	3
FIRE 165	Fundamentals of Fire Protection Chemistry	3
<b>or</b>		
PHYS 102	Introduction to Physics (Lecture)	3
<b>or</b>		
PHYS 120	General Physics	4
<b>or</b>		
PHSC 100	Introduction to Physical Science	3
<b>Elective Courses (Select 15 units)</b>		
FIRE 51	Fire Academy Preparation	2
FIRE 71	Trench Rescue	.5
FIRE 72	Swiftwater Rescue	.5
FIRE 98	Fire Service Skills	.5-5
FIRE 105	Fire Hydraulics	3
FIRE 115	Hazardous Materials I	3
<b>or</b>		
CHEM 100	Fundamentals of Chemistry	4
FIRE 125	Fire Apparatus and Equipment	3
FIRE 131	Emergency Preparedness	3
FIRE 132	Fundamentals of Emergency Management	3
FIRE 133	Disaster Mitigation	3
FIRE 145	Fire Fighting Tactics and Strategy	3
FIRE 151	Fire Fighter I Academy	18
FIRE 152	Driver Operator Academy	4.5
FIRE 160	Wildland Fire Control I	3
FIRE 168	Volunteer Fire Fighter Academy	4
FIRE 175	Fire Command IA	2
FIRE 176	Fire Command IB	2
FIRE 180	Fire Prevention IA	2
FIRE 181	Fire Prevention IB	2
FIRE 185	Fire Management I	2
FIRE 190	Fire Investigation IA	2
FIRE 193	Fire Instructor IA	2
FIRE 194	Fire Instructor IB	2
FIRE 197A	Fire Technology General Topics	.5-5
FIRE 197B	Fire Technology Command Topics	.5-5
FIRE 197C	Fire Technology Field Topics	.5-5
EME 106	Emergency Medical Tech Basic (Lecture)	6
CE 100	Cooperative Education	1-4
<b>TOTAL UNITS</b>		<b>31-32</b>

#### COURSE OFFERINGS

Courses numbered under 100 are not intended for transfer credit.

**FIRE 51 Fire Academy Preparation (2)**  
 4 hours lecture/laboratory  
**Note:** May be taken 4 times

This course prepares individuals for the demanding requirements of the Fire Academy. It will also prepare students for the Physical Ability test that is required to pass the North County Regional Fire Test. It breaks the test down into components, so that the student can more skillfully pass the exam. There will be time spent on application preparation and interview skills.

**FIRE 71 Trench Rescue (1.5)**

*1½ hours laboratory*

**Note:** Credit/No Credit grading only; may be taken 4 times

Comprehensive instruction with extensive hands-on application of the techniques necessary to safely effect a rescue from an excavation or trenching cave-in. Topics include: critical considerations while responding to trenching emergencies; establishing and operating the Incident Command System; evaluation of cave-in scenes; specialized tool usage; shoring techniques; below grade safety procedures; patient packaging; and patient removal techniques. Upon successful completion of the course, students will receive a California State Fire Marshal certificate.

**FIRE 72 Swiftwater Rescue (1.5)**

*1½ hours laboratory*

**Note:** Credit/No Credit grading only; may be taken 4 times

This course is intended for the training of fire service personnel in water rescue techniques. Topics include: Swiftwater rescue, submerged vehicles, drownings, use of engine/truck company equipment for water rescue, use of rafts and boats, and underwater search and recovery. Upon completion of the course, students will receive a California State Fire Marshal certificate.

**FIRE 98 Fire Service Skills (1.5-5)**

*1 to 10 hours lecture/laboratory*

**Note:** Credit/No Credit grading only; may be taken 4 times

This course covers fire service basic topics in the classroom for review and manipulative training for skills maintenance. All subjects will have to do with the duties and responsibilities of the fire services, in order to maintain a state of readiness.

**FIRE 100 Fire Protection Organization (3)**

*3 hours lecture*

**Transfer acceptability:** CSU

Provides an introduction to fire protection; career opportunities in fire protection and related fields; philosophy and history of fire protection; fire loss analysis; organization and function of public and private fire protection services; fire departments as part of local government; laws and regulations affecting the fire service; fire service nomenclature; specific fire protection functions; basic fire chemistry and physics; introduction to fire protection systems; introduction to fire strategy and tactics.

**FIRE 105 Fire Hydraulics (3)**

*3 hours lecture*

**Recommended preparation:** FIRE 100 and MATH 60

**Transfer acceptability:** CSU

Review of basic mathematics; hydraulic laws and formulas as applied to the fire service; application of formulas and mental calculation to hydraulic problems; water supply problems; underwriter's requirements for pumps.

**FIRE 115 Hazardous Materials I (3)**

*3 hours lecture*

**Transfer acceptability:** CSU

A review of basic chemistry; storage, handling, laws, standards, and fire fighting practices pertaining to hazardous materials.

**FIRE 118 Fire Prevention Technology (4)**

*4 hours lecture*

**Transfer acceptability:** CSU

Provides fundamental information regarding the history and philosophy of fire prevention, organization and operation of a fire prevention bureau, use of fire codes, identification and correction of fire hazards, and the relationships of fire prevention with built-in fire protection systems, fire investigation and fire safety education. Provides skills necessary for California Fire Service Training and Education system, Certified Firefighter I and Fire Inspector I. Meets requirements for CFSTES Fire Prevention IA and IB classes. Contains knowledge required for State Fire Training, Firefighter I Certification.

**FIRE 120 Building Construction for Fire Protection (3)**

*3 hours lecture*

**Transfer acceptability:** CSU

The study of the components of building construction that relate to fire/life safety. The development and evolution of building and fire codes will be studied in relationship to past fires/collapses in residential, commercial, and industrial occupancies.

**FIRE 125 Fire Apparatus and Equipment (3)**

*3 hours lecture*

**Transfer acceptability:** CSU

Driving laws, driving technique, construction and operation of pumping engines, ladder trucks, aerial platforms, specialized equipment, and apparatus maintenance.

**FIRE 130 Fire Protection Equipment and Systems (3)**

*3 hours lecture*

**Transfer acceptability:** CSU

Provides information relating to the features of design and operation of fire detection and alarm systems, heat and smoke control systems, special protection and sprinkler systems, water supply for fire protection, and portable fire extinguishers.

**FIRE 131 Emergency Preparedness (3)**

*3 hours lecture*

**Prerequisite:** FIRE 100

Emergency preparedness related to natural and man-made disasters. Planning concepts and the planning process; awareness and education programs and strategies for the fire student, business, and industry.

**FIRE 132 Fundamentals of Emergency Management (3)**

*3 hours lecture*

**Prerequisite:** FIRE 100

Emergency management systems related to career opportunities, tasks, function and responsibilities of the emergency management program director; the role in mitigation, preparedness, response and recovery. History of the civil defense department post World War II and the current emergency management system.

**FIRE 133 Disaster Mitigation (3)**

*3 hours lecture*

**Prerequisite:** FIRE 100

Knowledge and skills required to develop programs to reduce losses from future emergencies caused by natural and man-made disasters.

**FIRE 145 Fire Fighting Tactics and Strategy (3)**

*3 hours lecture*

**Transfer acceptability:** CSU

Review of fire chemistry, equipment, and manpower; basic fire fighting tactics and strategy; methods of attack; preplanning fire problems.

**FIRE 151 Fire Fighter I Academy (18)**

*36 hours lecture/laboratory*

**Prerequisite:** EME 106 or certification as an EMT I, and admission to the Fire Fighter I Academy program

**Transfer acceptability:** CSU

A 576 hour fire fighter academy course which will meet the requirements mandated by the California Office of State Fire Marshal for Certified Fire Fighter I training. Covers fire ground procedures, tactics, strategy, safety methods, fire dynamics, equipment usage and deployment, and subject material pertaining to the role of fire fighters within the fire service.

**FIRE 152 Driver Operator Academy (4.5)**

*9 hours lecture/laboratory*

**Recommended preparation:** FIRE 100 and 151

**Transfer acceptability:** CSU

Comprehensive instruction in all aspects of operating fire apparatus. This includes fire apparatus construction and maintenance; driving laws; safe driving practices; fire pump theory; fire pump service testing; hydraulic laws and formulas as applied to the fire service; developing effective fire streams; identification and use of the

various hose, nozzles, and fittings used in the fire service; water supply; nationally recognized standards for fire apparatus and equipment.

**FIRE 160 Wildland Fire Control I (3)**  
3 hours lecture

**Transfer acceptability:** CSU

Provides employed firefighters or fire service majors with a fundamental knowledge of the factors affecting wildland fire prevention, fire behavior, and control techniques.

**FIRE 165 Fundamentals of Fire Protection Chemistry (3)**  
3 hours lecture

**Recommended preparation:** FIRE 100

**Transfer acceptability:** CSU

Provides the student with fundamental information and knowledge of the physical and chemical characteristics of matter, fire, hazardous materials, and basic extinguishment theory.

**FIRE 168 Volunteer Fire Fighter Academy (4)**  
8½ hours lecture/laboratory

**Transfer acceptability:** CSU

Basic fire fighting skills needed to begin a career in the fire service. Meets State Fire Marshal requirements.

**FIRE 175 Fire Command IA (2)**  
2 hours lecture

**Transfer acceptability:** CSU

Course provides instruction and simulation time to the participants while engaged in the initial decision and action processes at a working fire. The course includes discussion regarding the fire officer, fire behavior, fireground resources, operations, and management.

**FIRE 176 Fire Command IB (2)**  
2 hours lecture

**Transfer acceptability:** CSU

A descriptive analysis in tactics and strategies and scene management principles for incidents involving hazardous materials. Emphasizes identification and hazard mitigation, decontamination, protective clothing, environmental concerns, and legal issues.

**FIRE 180 Fire Prevention IA (2)**  
2 hours lecture

**Transfer acceptability:** CSU

Includes general fire inspection practices and responsibilities of fire prevention personnel. Essential equipment of code enforcement and procedures for correcting fire hazards. Fire extinguishers, fixed systems, and determination of operational readiness of these systems.

**FIRE 181 Fire Prevention IB (2)**  
2 hours lecture

**Transfer acceptability:** CSU

Includes the relationship of life safety codes and requirements to building construction principles and building occupancy classifications. The engineering solutions to various hazards, enforcing the solution, and public relations as affected by fire prevention in handling complaints.

**FIRE 185 Fire Management I (2)**  
2 hours lecture

**Transfer acceptability:** CSU

Supervision and management, leadership styles and techniques, development of policies and procedures, time management, stress management, and personnel appraisal and counseling guidelines.

**FIRE 190 Fire Investigation IA (2)**  
2 hours lecture

**Transfer acceptability:** CSU

Fire behavior and building construction, investigative techniques required for incendiary, accidental, fatal, vehicle, wildland, and juvenile fire investigations; procedures to collect and preserve physical evidence, and investigative report writing.

**FIRE 193 Fire Instructor IA (2)**  
2 hours lecture

**Transfer acceptability:** CSU

Standard State Board of Fire Services accredited course offered in community colleges. Basic information includes: occupational analysis, course outlines, concepts of learning, levels of instruction, behavioral objectives, using lesson plans, psychology of learning, and evaluation of effectiveness. Activities include student teaching demonstrations.

**FIRE 194 Fire Instructor IB (2)**  
2 hours lecture

**Transfer acceptability:** CSU

Standard State Board of Fire Services accredited course offered in community colleges. Advanced topics include: preparing course outlines, establishing levels of instruction, constructing behavioral objectives and lesson plans, instructional aid development, fundamentals of testing and measurements, tests planning, evaluation techniques and tools. Activities include student teaching demonstrations.

**FIRE 197A Fire Technology General Topics (.5-5)**

Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture, laboratory, or lecture/laboratory may be scheduled by the department. Refer to Class Schedule.

**Note:** May be taken 4 times

**Transfer acceptability:** CSU

Topics in Fire technology General. See Class Schedule for specific topic offered. Course title will designate subject covered.

**FIRE 197B Fire Technology Command Topics (.5-5)**

Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture, laboratory, or lecture/laboratory may be scheduled by the department. Refer to Class Schedule.

**Note:** May be taken 4 times

**Transfer acceptability:** CSU

Topics in Fire Technology Command. See Class Schedule for specific topic offered. Course title will designate subject covered.

**FIRE 197C Fire Technology Field Topics (.5-5)**

Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture, laboratory, or lecture/laboratory may be scheduled by the department. Refer to Class Schedule.

**Note:** May be taken 4 times

**Transfer acceptability:** CSU

Topics in Fire Technology Field. See Class Schedule for specific topic offered. Course title will designate subject covered.

## Foreign Languages (FL)

See Arabic, Chinese, French, German, Italian, Japanese, Spanish, and Tagalog.

Contact the Foreign Languages Department for further information, (760) 744-1150, ext. 2390

### COURSE OFFERINGS

**FL 194A Foreign Languages Experimental Topics (3)**  
3 hours lecture

**Note:** May be taken 4 times

**Transfer acceptability:** CSU

Foreign Languages not covered by regular foreign language offerings. Course content to be determined in relation to community/student need (s). Course title will designate language and level covered. See Class Schedule for specific language and level being offered.

**FL 194B Foreign Languages Experimental Topics (3)**  
3 hours lecture

**Note:** May be taken 4 times

**Transfer acceptability:** CSU

Foreign Languages not covered by regular foreign language offerings. Course content to be determined in relation to community/student need(s). Course title will designate language and level covered. See Class Schedule for specific language and level being offered.

**FL 194C Foreign Languages Experimental Topics (3)**

3 hours lecture

**Note:** May be taken 4 times**Transfer acceptability:** CSU

Foreign Languages not covered by regular foreign language offerings. Course content to be determined in relation to community/student need (s). Course title will designate language and level covered. See Class Schedule for specific language and level being offered.

**FL 197 Foreign Languages Topics (.5-5)**

Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture, laboratory, or lecture/laboratory may be scheduled by the department. Refer to Class Schedule.

**Note:** May be taken 4 times**Transfer acceptability:** CSU

Topics in Foreign Languages. See Class Schedule for specific topic offered. Course title will designate subject covered.

**French (FREN)**

Contact the Foreign Languages Department for further information, (760) 744-1150, ext. 2390

**COURSE OFFERINGS**

For students who have completed foreign language course work at the high school level, and need clarification regarding placement in college level course work, contact the Counseling Center. Universities have varying policies regarding the granting of transfer credit when there is a combination of high school and college level course work.

**FREN 101 French I (5)**

5 hours lecture/1 hour laboratory

**Transfer acceptability:** CSU; UC; CAN FREN 2; FREN 101+102 = CAN FREN SEQ A

This course is the first semester of French. This elementary level course is a study of the French language and French-speaking cultures, with emphasis on the development of communicative skills and basic structures. Course combines in-class instruction and practice with self-paced study in the Foreign Language Laboratory. This beginning-level course is for students with no previous coursework in French.

**FREN 101A French IA (3)**

(Formerly FREN 105)

3 hours lecture

**Note:** Covers the first half of FREN 101; not open to students with credit for FREN 101**Transfer acceptability:** CSU; UC

French 101A is equivalent to the first half of French 101. This elementary level course is a study of the French language and French-speaking cultures, with emphasis on the development of communicative skills and basic structures. This beginning-level course is for students with no previous coursework in French.

**FREN 101B French IB (3)**

(Formerly FREN 106)

3 hours lecture

**Prerequisite:** FREN 101A or one year of high school French**Note:** Covers the second half of FREN 101; not open to students with credit for FREN 101**Transfer acceptability:** CSU; UC

French 101B is equivalent to the second half of French 101, and is a continuation of French 101A. This elementary level course is a study of the French language and French-speaking cultures, with emphasis on the development of communicative skills and basic structures.

**FREN 102 French II (5)**

(Formerly FREN 110)

5 hours lecture 1 hour laboratory

**Prerequisite:** FREN 101 or 101B or two years of high school French**Transfer acceptability:** CSU; UC; CAN FREN 4; FREN 101+102= CAN FREN**SEQ A**

This course is the second semester of French. This elementary level course is a study of the French language and French-speaking cultures, with continued emphasis on the development of communicative skills and basic structures. Course combines in-class instruction with self-paced study in the Foreign Language Laboratory.

**FREN 102A French IIA (3)**

(Formerly FREN 115)

3 hours lecture

**Prerequisite:** FREN 101 or 101B or two years of high school French**Note:** Covers the first half of FREN 102; not open to students with credit for FREN 102**Transfer acceptability:** CSU; UC

French 102A is equivalent to the first half of French 102. This elementary level course is a study of the French language and French-speaking cultures, with continued emphasis on the development of communicative skills and basic structures.

**FREN 102B French IIB (3)**

(Formerly FREN 116)

3 hours lecture

**Prerequisite:** FREN 101 OR 101B or two years of high school French**Note:** Covers the second half of FREN 102; not open to students with credit for FREN 102**Transfer acceptability:** CSU; UC

French 102B is equivalent to the second half of French 102, and is a continuation of French 102A. This elementary level course is a study of the French language and French-speaking cultures, with continued emphasis on the development of communicative skills and basic structures.

**FREN 140 Basic French Pronunciation (1)**

1 hour lecture

**Transfer acceptability:** CSU

Practice in the basics of French pronunciation. Emphasis on the correct use of intonation, stress, and rhythm.

**FREN 197 French Topics (.5-4)**

Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture, laboratory, or lecture/laboratory may be scheduled by the department. Refer to Class Schedule.

**Note:** May be taken 4 times**Transfer acceptability:** CSU; UC – Credit determined by UC upon review of course syllabus.

Topics in French. See Class Schedule for specific topic offered. Course title will designate subject covered.

**FREN 201 French III (5)**

5 hours lecture

**Prerequisite:** FREN 102 or 102B three years of high school French**Transfer acceptability:** CSU; UC; CAN FREN 8, FREN 201+202= CAN FREN SEQ B

This course is the third semester of French. This intermediate level course is a study of the French language and French-speaking cultures, focusing on intermediate level structures and readings of culturally relevant authentic materials. Emphasis is on developing oral, listening, reading and writing skills in order to acquire proficiency in French. Class is largely conducted in French.

**FREN 202 French IV (5)**

(Formerly FREN 210)

5 hours lecture

**Prerequisite:** FREN 201 or four years of high school French**Transfer acceptability:** CSU; UC; CAN FREN 10, FREN 201+202= CAN FREN SEQ B

This course is the fourth semester of French. This intermediate level course is a study of the French language and of special topics on the culture of the French-speaking world. Emphasis is on further development of oral, listening, reading and writing skills in order to improve communicative competence in French. Class is largely conducted in French.



## Geography (GEOG)

Contact the Earth Sciences Department for further information, (760) 744-1150, ext. 2512

Associate in Arts degree requirements, Certificate of Achievement requirements, and Certificate of Proficiency requirements are listed in Section 6 (green pages) of the catalog.

### PROGRAM OF STUDY

#### Geographic Information Systems

The Geographic Information Systems Certificate program is designed to provide entry-level training for students seeking employment in this fast-growing profession, or to upgrade the skills for those already working in the field of Geographic Information Systems. The program may be completed in one year including summer session.

Associate in Arts degree requirements are listed in Section 6 of the catalog. Certificates of Achievement or Proficiency require a minimum grade of 'C' in each of the required courses.

### CERTIFICATE OF PROFICIENCY

Program Requirements		Units
GEOG 120	Intro to Geographic Information Sys/GIS Software	4
GEOG 132	Database Management and Data Acquisition	4
GEOG 136	Intermediate ArcGIS: GIS Analysis	2
GEOG 138	GIS Internship	2

#### Electives (Select 1 course)

CSIS 117	Introductions to Visual Basic	4
GEOG 134	GIS Applications	2

**TOTAL UNITS 14- 16**

### COURSE OFFERINGS

#### GEOG 100 Physical Geography (3)

3 hours lecture

**Transfer acceptability:** CSU; UC; CAN GEOG 2

A study of earth's physical environment with emphasis on weather, climate, landform, soils, and natural vegetation and the interrelationship between these elements within unique physical landscapes.

#### GEOG 100L Physical Geography Laboratory (1)

3 hours laboratory

**Prerequisite:** Completion of, or concurrent enrollment in, GEOG 100

**Transfer acceptability:** CSU; UC

Laboratory and field investigations in weather elements, climate regions, soils, world ecosystems, and Earth's landform features. Satisfies laboratory requirement in physical sciences.

#### GEOG 103 World Regional Geography (3)

3 hours lecture

**Transfer acceptability:** CSU; UC

Critical survey of the major world regions with specific focus on physical and cultural components, such as development, economics, population and migration, political structure, and natural resources and the physical environment.

#### GEOG 105 Introduction to Human Geography (3)

3 hours lecture

**Transfer acceptability:** CSU; UC; CAN GEOG 4

Human elements of geography, including population distribution, general land use patterns, religion, trade and economy, and their correlation with the physical elements. Emphasis on world cultural regions with attention paid to interdependence and globalization.

#### GEOG 110 Meteorology: Weather and Climate (3)

3 hours lecture

**Transfer acceptability:** CSU; UC

Elements of weather including temperature, moisture, air pressure, and circulation of the atmosphere; air masses, storms, and their geographical distribution. Practical applications in the use of weather instruments, and the reading and interpretation of weather maps and climatological data.

#### GEOG 115 Natural Disasters and Environmental Hazards (3)

3 hours lecture

**Transfer acceptability:** CSU; UC

Examination and analysis of natural disasters and environmental hazards including earthquakes, volcanic activity, landslides, atmospheric pollution, water pollution, flooding, waste disposal, global climate change, and medical geology and geography.

#### GEOG 120 Introduction to Geographic Information Systems and GIS Software (3)

3 hours lecture/3 hours laboratory

**Recommended preparation:** GEOG 100 and CSIS 105

**Transfer acceptability:** CSU; UC

This course is an introduction to the mapping sciences with a primary focus on Geographic Information Systems (GIS). Course will cover the trends, history, structure, application, hardware and software, and basic operations of GIS in order to provide a foundation for the use of GIS software. Related geographic technologies to be examined include mapping, aerial and satellite imagery, and Global Positioning Systems (GPS). The lab portion of the course will provide introductory training in the use of ArcGIS software including identifying, evaluating, and inputting spatial data, developing and using raster and vector data sets, converting data from one form to another, and applying programming with GIS software.

#### GEOG 125 California Geology and Geography (3)

3 hours lecture

**Note:** Cross listed as GEOL 125

**Transfer acceptability:** CSU; UC

Emphasizes the physical geographic and geologic factors that have combined to form the varied landscapes of California. Climate and vegetation patterns, as well as the various geomorphic processes will be studied.

#### GEOG 132 Database Management and Data Acquisition (4)

4 hours lecture

**Prerequisite:** Completion of, or concurrent enrollment in, GEOG 120

**Transfer acceptability:** CSU

Course provides students with knowledge and practical experience in the fundamentals of database management, and the acquisition, conversion, and creation of spatial data within Geographic Information Systems (GIS). Topics to include strategic design, querying, modeling techniques, data appropriateness and accuracy, hardware and software requirements, conversion of digital data, creating digital data using digitizers, scanners and Global Positioning Systems (GPS), and utilization of remote sensing, photogrammetry, and web-based data. This course provides hands-on experience with database management and data acquisition using ArcGIS software.

#### GEOG 134 GIS Applications (2)

4 hours lecture/laboratory

**Prerequisite:** GEOG 120

**Transfer acceptability:** CSU

This course provides students with knowledge and practical experience in Geographic Information Systems (GIS) applications. Students will learn the fundamentals of GIS programming, converting data for web publications, and developing GIS applications. The lab portion of this course provides hands-on experience with GIS programming using Visual Basic for Applications (VBA), data conversion using Arc Tools, and applications development using MapObjects software.

#### GEOG 136 Intermediate ArcGIS: GIS Analysis (2)

4 hours lecture/laboratory

**Prerequisite:** GEOG 120

**Transfer acceptability:** CSU

This course will focus on more complex operations in using ArcGIS software. Students will gain hands-on experience in advanced querying operations, the use of ArcGIS extensions such as Spatial Analyst and 3D Analyst, transforming coordinates using Coordinate Geometry, using a GPS unit to generate and input spatial data, and the application of ArcGIS as an analytical tool in a variety of disciplines.

**GEOG 138 GIS Internship (2)**

6 hours laboratory  
**Prerequisite:** GEOG 120

**Transfer acceptability:** CSU

The Geographic Information Systems (GIS) internship is a directed program allowing students to apply classroom instruction to real-world GIS problem solving by working with a government or private agency. Students will be under the supervision of an instructor from the college and an advisor from the agency while working in one or more aspects of GIS operations.

**GEOG 195 Regional Field Studies in Geography (1,2,3)**

2, 4, or 6 hours lecture/laboratory

**Note:** May be taken 4 times with different content for a maximum of six units

**Transfer acceptability:** CSU; UC – Credit determined by UC upon review of course syllabus.

Extended field studies of the geography of selected regions. Emphasis upon field observation and interpretation of climate, meteorology, vegetation, soils, and landforms.

**GEOG 295 Directed Study in Geography (1,2,3)**

3, 6, or 9 hours laboratory

**Prerequisite:** Approval of project or research by instructor

**Note:** May be taken 4 times for a maximum of six units

**Transfer acceptability:** CSU; UC – Credit determined by UC upon review of course syllabus.

Independent study for students who have demonstrated skills and/or proficiencies in geography subjects and have the initiative to work independently on projects or research outside the context of regularly scheduled classes. Students will work under the personal supervision of an instructor.

## Geology (GEOL)

Contact the Earth Sciences Department for further information, (760) 744-1150, ext. 2512

Associate in Arts degree requirements, Certificate of Achievement requirements, and Certificate of Proficiency requirements are listed in Section 6 (green pages) of the catalog.

### PROGRAM OF STUDY

### Geology

Provides the student with sufficient background to begin upper division coursework and will prepare the student for entry-level jobs that require geologic knowledge. The student is advised to check with the school to which he/she may wish to transfer for additional courses which may be required.

### A.A. DEGREE MAJOR

**Program Requirements**

	<b>Units</b>
Group One	
GEOG 100 Basic Geology	3
GEOG 100L Basic Geology Laboratory	1
GEOG 150 Dinosaurs and Earth History	3
GEOG 150L Dinosaurs and Earth History Laboratory	1
GEOG 195 Regional Field Studies in Geology	2
<b>Group Two (Select at least two sets of courses listed below)</b>	
<b>Set 1</b>	
MATH 140 and Calculus/Analytic Geometry, First Course	5
MATH 141 and Calculus/Analytic Geometry, Second Course	4

**Set 2**

PHYS 120 and 121 General Physics	8
or	
PHYS 230 and 231 Principles of Physics	10

**Set 3**

CHEM 110 General Chemistry	3
CHEM 110L General Chemistry Laboratory	2
CHEM 115 General Chemistry	3
CHEM 115L General Chemistry Laboratory	2

**Group Three (Select at least 8 units)**

Any other courses in Group Two not taken above	8 10
GEOG 110 General Geology: National Parks	3
GEOG/GEOG 125 California Geology and Geography	3
GEOG 195 Regional Field Studies in Geology	1,2,3
GEOG 197 Geology Topics	1-3
GEOG 295 Directed Study in Geology	1,2,3
ASTR 100 Principles of Astronomy	3
BIOL 100 General Biology	4
MATH 205 Calculus/Analytic Geometry, Third Course	4
MATH 206 Calculus/Differential Equations	4
OCN 100 Oceanography	3
OCN 100L Oceanography Laboratory	1
OCN 115 Coastal Oceanography	3
PHYS 232 Principles of Physics	4

**TOTAL UNITS 35-38**

### COURSE OFFERINGS

**GEOG 100 Basic Geology (3)**

3 hours lecture

**Note:** Together with GEOG 150, a prerequisite to upper division courses in Geology.

**Transfer acceptability:** CSU; UC; CAN GEOG 6

Principles of physical geology. Plate tectonics, rocks and minerals, weathering, mass-wasting, surface and ground water, wind, waves and currents, glaciation, mountain building, volcanoes and other igneous activity, deformation and resulting structures, earthquakes, Earth's interior, geologic time, and earth resources.

**GEOG 100L Basic Geology Laboratory (1)**

3 hours laboratory

**Prerequisite:** Completion of, or concurrent enrollment in, GEOG 100

**Note:** May be offered as a field laboratory; satisfies lab requirement in Physical Science

**Transfer acceptability:** CSU; UC

Laboratory and field identification of rocks and rock forming minerals. Study of geologic processes by means of geologic and topographic maps.

**GEOG 110 General Geology: National Parks and Monuments (3)**

3 hours lecture

**Transfer acceptability:** CSU

Geologic history and processes of formation of our natural landscape. Principles of physical and historical geology as revealed in the structure, stratigraphy, and rock types of the parks and monuments.

**GEOG 120 Planets, Moons, and Comets (4)**

3 hours lecture

**Note:** Cross listed as ASTR 120

**Transfer acceptability:** CSU; UC – ASTR/GEOG 120 and ASTR 205 combined: maximum credit, one course

The astronomy and geology of the solar system, observations, dynamics, relativistic ideas, including theories of formation and evolution. Comparative survey of the atmospheres, surface features, and interiors of planets and satellites. Minor objects, such as comets and asteroids, will be included.

**GEOL 125 California Geology and Geography (3)**

3 hours lecture

**Note:** Cross listed as GEOG 125**Transfer acceptability:** CSU; UC

Emphasizes the physical geographic and geologic factors that have combined to form the varied landscapes of California. Climate and vegetation patterns, as well as the various geomorphic processes will be studied.

**GEOL 150 Dinosaurs and Earth History (3)**

3 hours lecture

**Prerequisite:** GEOL 100, 110 or 125**Transfer acceptability:** CSU; UC

Principles of historical geology. The origin and evolution of Earth and its biosphere, incorporating plate tectonics, stratigraphy, paleontology, and geologic dating. Together with GEOL 100, a prerequisite to upper division courses in geology.

**GEOL 150L Dinosaurs and Earth History Laboratory (1)**

3 hours laboratory

**Prerequisite:** Completion of, or concurrent enrollment in, GEOL 150**Transfer acceptability:** CSU; UC

Laboratory and field identification of rocks and fossils. Elements of stratigraphic methods and of vertebrate and invertebrate paleontology. Study of geologic and topographic maps in relation to earth history.

**GEOL 195 Regional Field Studies in Geology (1,2,3)**

2, 4, or 6 hours lecture/laboratory

**Prerequisite:** GEOL 100 or GEOL 110 or GEOL 125 or GEOG 100**Note:** May be taken 4 times with different content for a maximum of 6 units**Transfer acceptability:** CSU; UC – Credit determined by UC upon review of course syllabus.

Extended field studies of the geology of western North America over weekends and during vacation and summer sessions. Emphasis upon field observation and interpretation of rock types, landforms, and structure. Localities visited may vary from year to year.

**GEOL 197 Geology Topics (1-3)**

Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture, laboratory, or lecture/laboratory may be scheduled by the department. Refer to Class Schedule.

**Note:** May be taken 3 times for a maximum of 6 units**Transfer acceptability:** CSU

Topics in Geology. See Class Schedule for specific topic offered. Course title will designate subject covered

**GEOL 295 Directed Study in Geology (1,2,3)**

Arrange 3, 6, or 9 hours laboratory with department chairperson

**Prerequisite:** GEOL 150**Note:** May be taken 4 times for a maximum of 6 units**Transfer acceptability:** CSU – UC Credit determined by UC upon review of course syllabus.

Individual study in field, library, or laboratory for interested students.

**German (GERM)**

Contact the Foreign Languages Department for further information, (760) 744-1150, ext. 2390

**COURSE OFFERINGS**

For students who have completed foreign language course work at the high school level, and need clarification regarding placement in college level course work, contact the Counseling Center. Universities have varying policies regarding the granting of transfer credit when there is a combination of high school and college level course work.

**GERM 101 German I (5)**

5 hours lecture / 1 hour laboratory

**Transfer acceptability:** CSU; UC; CAN GERM 2; GERM 101+102 =CAN**GERM SEQ A**

This course is the first semester of German. This elementary level course is a study of the German language and German-speaking cultures, with emphasis on the development of communicative skills and basic structures. Course combines in-class instruction and practice with self-paced study in the Foreign Language Laboratory. This beginning-level course is for students with no previous coursework in German.

**GERM 101A German IA (3)****(Formerly GERM 105)**

3 hours lecture

**Note:** Covers the first half of GERM 101; not open to students with credit for GERM 101**Transfer acceptability:** CSU; UC

German 101A is equivalent to the first half of German 101. This elementary level course is a study of the German language and German-speaking cultures, with emphasis on the development of communicative skills and basic structures. This beginning-level course is for students with no previous coursework in German.

**GERM 101B German IB (3)****(Formerly GERM 106)**

3 hours lecture

**Prerequisite:** GERM 101A or one year of high school German**Note:** Covers the second half of GERM 101; not open to students with credit for GERM 101**Transfer acceptability:** CSU; UC

German 101B is equivalent to the second half of German 101, and is a continuation of German 101A. This elementary level course is a study of the German language and German-speaking cultures, with emphasis on the development of communicative skills and basic structures.

**GERM 102 German II (5)****(Formerly GERM 110)**

5 hours lecture / 1 hour laboratory

**Prerequisite:** GERM 101 or 101B or two years of high school German**Transfer acceptability:** CSU; UC; CAN GERM 4; GERM 101 + 102 = CAN GERM SEQ A

This course is the second semester of German. This elementary level course is a study of the German language and German-speaking cultures, with continued emphasis on the development of communicative skills and basic structures. Course combines in-class instruction with self-paced study in the Foreign Language Laboratory.

**GERM 102A German IIA (3)****(Formerly GERM 115)**

3 hours lecture

**Prerequisite:** GERM 101 or 101B or two years of high school German**Note:** Covers the first half of GERM 102; not open to students with credit for GERM 102**Transfer acceptability:** CSU; UC

German 102A is equivalent to the first half of German 102. This elementary level course is a study of the German language and German-speaking cultures, with continued emphasis on the development of communicative skills and basic structures.

**GERM 102B German IIB (3)****(Formerly GERM 116)**

3 hours lecture

**Prerequisite:** GERM 102A or two years of high school German**Note:** Covers the second half of GERM 102; not open to students with credit for GERM 102**Transfer acceptability:** CSU; UC

German 102B is equivalent to the second half of German 102, and is a continuation of German 102A. This elementary level course is a study of the German language and German-speaking cultures, with continued emphasis on the development of communicative skills and basic structures.

**GERM 201 German III (5)**

5 hours lecture

**Prerequisite:** GERM 102 or three years of high school German

**Transfer acceptability:** CSU; UC; CAN GERM 8; GERM 201

+ 202= CAN GERM SEQ B

This course is the third semester of German. This intermediate level course is a study of the German language and German-speaking cultures, focusing on intermediate level structures and readings of culturally relevant authentic materials. Emphasis is on developing oral, listening, reading and writing skills in order to acquire proficiency in German. Class is largely conducted in German.

**GERM 202 German IV (5)**  
**(Formerly GERM 210)**

5 hours lecture

**Prerequisite:** German 201 or four years of high school German

**Transfer acceptability:** CSU; UC; CAN GERM 10; GERM 201+ 202= CAN GERM SEQ B

This course is the fourth semester of German. This intermediate level course is a study of the German language and of special topics on the culture of the German-speaking world. Emphasis is on further development of cross-cultural awareness, as well as, the development of oral, listening, reading and writing skills in order to improve communicative competence in German. Class is largely conducted in German.

**Graphic Communications (GC)**

Contact the Graphic Communications Department for further information, (760) 744-1150, ext. 2452. For transfer information, consult a Palomar College counselor.

Associate in Arts degree requirements, Certificate of Achievement requirements, and Certificate of Proficiency requirements are listed in Section 6 (green pages) of the catalog.

**PROGRAMS OF STUDY**

**Digital Animation, Compositing, and Music**

This program is directed at the digital design and implementation of 3D animations, graphic compositing and music.

**CERTIFICATE OF PROFICIENCY**

Program Requirements	Units
<b>(5 courses minimum required, 15 units total)</b>	
ARTI 246 Digital 3D Design and Modeling	3
ARTI 247 Digital 3D Design and Animation	3
GC 204 Motion Graphics for Multimedia-A	3
GC 213 Motion Graphics Production and Compositing	3
MUS 180 Computer Music I	3
MUS 184 Electronic Ensemble	3
<b>TOTAL UNITS</b>	<b>15</b>

Digital Animation, Compositing, and Music Certificate of Proficiency is also listed in Art and in Music.

**Digital Arts**

Specific skills for the Digital Arts certificate include graphic design methodologies, including the design process, output production and presentation. The certificate prepares students to gain competence with the industry standard for digital imaging: Adobe Photoshop. Color, resolution, input and output, production process, photography and creativity are core competencies. Upon completion of the certificate, the student may find a job as a production artist, illustrator, graphic artist, or in digital imaging.

**CERTIFICATE OF PROFICIENCY**

Program Requirements	Units
ARTD 150 Digital Concepts/Techniques in Art	3
GC/R GC 140 Digital Imaging/Photoshop I	3
GC 141 Digital Imaging/Photoshop II	3
GC 142 Digital Imaging/Photoshop III	3
PHOT 230 Digital Darkroom	3.5

**TOTAL UNITS 15.5**

**Digital Imaging**

Prepares students for entry-level position as creator and processor of digital imagery. Layout and creative position in multimedia, internet publishing, digital video, publishing, photography, and motion graphics.

Digital imaging is one of the basic requirements for all electronic communication delivery systems.

A.A. Degree Major or Certificate of Achievement

Program Requirements	Units
GC/R GC 140 Digital Imaging/Photoshop I	3
GC 141 or Digital Imaging/Photoshop II	3
GG 147 and Intermediate Photoshop – Part I	1.5
GC 148 Intermediate Photoshop – Part II	1.5
GC 142 Digital Imaging/Photoshop III	3
GC 204 Motion Graphics for Multimedia-A	3
GC 206 Web Multimedia	3
GC 207 Motion Graphics for Multimedia-B	3
GC 220 Introduction to Painter	3
PHOT 100 Elementary Photography	3.5
PHOT 230 Digital Darkroom	3.5

**TOTAL UNITS 28**

Digital Imaging A.A. Degree Major or Certificate of Achievement is also listed under Photography.

**Digital Media**

Digital Media encompasses digital video editing in both analog and digital media. The certificate prepares students for employment in the film, video, Internet, and television industries. Major growth in this industry is anticipated as Internet and television merge into one medium.

**CERTIFICATE OF PROFICIENCY**

Program Requirements	Units
<b>(5 courses minimum required, 15 units total)</b>	
CINE/RTV 125 or Beg Film/Video Field Production	3
GC/R GC 140 Digital Imaging/Photoshop I	3
RTV 270 Computer Video Editing	3
GC 204 Motion Graphics for Multimedia-A	3
GC 207 Motion Graphics for Multimedia-B	3
RTV 275 Avid Editing for Television & Film	3

**TOTAL UNITS 15**

Digital Media Certificate of Achievement is also listed under Radio and Television.

**Digital Prepress Operator**

Prepares students to pursue entry-level employment in the printing industry in prepress, press, and finishing processes.

**CERTIFICATE OF PROFICIENCY**

Program Requirements	Units
GC 180 Digital Prepress and Press I	3
GC 182 Digital Prepress and Press II	3
GC 185 Advanced Offset Press	3

**TOTAL UNITS 9**

## Digital Publishing

Designed to meet the increasing needs of organizations and businesses that distribute publications in both electronic and print media. Specific skills for the Digital Publishing certificate include typography, visual acuity, graphic design and layout. The certificate prepares students to gain competence with the basic applications used in industry for digital graphics and electronic publishing. Teamwork, problem solving, workflow and production process, communication and creativity are core competencies. Upon completion of the certificate, the student may find a job as a production artist, illustrator, graphic artist, graphic designer, or in digital imaging.

### CERTIFICATE OF PROFICIENCY

Program Requirements	Units
GC/R GC 140 Digital Imaging/Photoshop I	3
GC 141 Digital Imaging/Photoshop II	3
GC/R GC 149 Page Layout and Design I	3
GC/R GC 152 Desktop Publishing with Illustrator	3
GC/R GC 203 Interactive Publishing with PDFs	3
<b>TOTAL UNITS</b>	<b>15</b>

## Digital Video

Digital Video encompasses editing and design in using both digital and analog media. This degree prepares students for employment in the film, video, Internet, and television industries.

### A.A. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT

Program Requirements	Units
GC/R GC 140 Digital Imaging/PhotoShop I	3
GC 165 Digital Video Design	3
GC 204 Motion Graphics for Multimedia-A	3
GC 207 Motion Graphics for Multimedia-B	3
RTV/CINE 125 Beg Film/Video Field Production	3
RTV 230 Digital Audio with Pro Tools	3
RTV 270 Digital Video Editing	3
RTV 275 Avid Editing for Television and Film	3

Electives (2 courses minimum required, 6 units total)	Units
ARTI 246 Digital 3D Design and Modeling	3
ARTI 247 Digital 3D Design and Animation	3
DT 180 3D Studio Max-Intro to 3D Modeling/Animation	3
GC 142 Digital Imaging/PhotoShop III	3
GC/R GC 152 Desktop Publishing with Illustrator	3
GC/R GC 200 Introduction to Multimedia	3
GC 201 Intermediate Multimedia	3
GC 206 Web Multimedia	3
GC 208 Web Motion Graphics I	3
GC 209 Web Motion Graphics II	3
RTV 50 Basic Television Acting	1
RTV 110 Broadcast Writing and Producing	3
RTV/ENTT 120 Basic Television Production	3
RTV 150 Performance and Acting for Broadcast and Film	3
RTV 170 Introduction to Video Editing	3
RTV/CINE 225 Intermediate Film and Video Field Production	3
<b>TOTAL UNITS</b>	<b>30</b>

Digital Video A.A. Degree Major or Certificate of Achievement is also listed under Radio and Television.

## E - Commerce Design

Provides students with a basis for understanding and participating in the design and production of e-business and e-commerce. Specific skills for the E-Commerce Design certificate include Web production, site accessibility, shopping carts, site and data management, security, privacy, and commercial site promotion.

Teamwork, problem solving, production process, communication and creativity are core competencies. Upon completion of the certificate, the student may find a job as a graphic designer, Web author, or graphical user interface designer.

### CERTIFICATE OF PROFICIENCY

Program Requirements	Units
BUS 157 E-Commerce	3
GC 212 Web Page Layout II	3
GC 215 or Designing for Web Standards I	
GC 216 Web Data Base Design I	3
GC 217 Online Store Design I	3
GC 218 Online Store Design II	3
GC 232 Web Accessibility Design	1
GC 290 or Copyright for Graphic Design and Web Developers	
GC 291 Contracts for Graphic Design and Web Developers	1
<b>TOTAL UNITS</b>	<b>17</b>

## Electronic Publisher

Electronic publishing encompasses computer-based document layout, composition, typography, illustration, scanning, image modification, as well as reproduction and distribution. It has revolutionized print communications. There will be a major growth in this field in the future.

Employment opportunities will be with commercial printers, corporate electronic publishers, small print shops, service bureaus, direct mail companies, magazine publishers, advertising, typographers and compositors, freelance publications, newspaper publishers, marketing and ad agencies, and in-plant printers.

### CERTIFICATE OF PROFICIENCY

Required Courses	Units
GC 105 Layout for Offset Lithography	3
GC/R GC 140 Digital Imaging/Photoshop I	3
GC/R GC 149 Page Layout and Design I	3
<b>TOTAL UNITS</b>	<b>9</b>

## Graphic Communications Emphasis in Electronic Publishing

Electronic publishing—which encompasses computer based document layout, composition, typesetting, illustration, scanning, image modification, reproduction, and distribution—has revolutionized print communications. There will be major growth in this field in the future. Employment opportunities will be with commercial printers, corporate electronic publishers, small printers, service bureaus, quick printers, direct mail companies, magazine publishers, advertising, typographers and compositors, freelance publications, newspaper publishers, inplant printers, and other still growing applications.

The 18 units of Program Requirements are the same for Graphic Communications Emphasis in Electronic Publishing, Graphic Communications Emphasis in Management, and Graphic Communications Emphasis in Production. Students may complete one or more of these programs by completing the Program Requirements, Emphasis Requirements and Electives listed for each program.

### A.A. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT

Program Requirements (18 units)	Units
GC 100 or Graphic Communications	3
GC 101 History of Graphic Communications	3
GC 105 Layout for Offset Lithography	3
GC/R GC 140 Digital Imaging/Photoshop I	3
GC 180 Digital Prepress and Press I	3
GC/R GC 149 Page Layout and Design I	3
GC/R GC 248 Acrobat for Print	3

**Emphasis Requirements (9 units)**

ARTD 210	Typography Design	3
GC/R GC 152	Desktop Publishing with Illustrator	3
GC/R GC 260	Portfolio Development and Presentation	3

**Electives (Select one course, 1 – 4 units)**

ARTD 100	Graphic Design I	3
CSIS 105	Computer Concepts/Microcomputer Applications	3
DT/R DT 125	AutoCAD Introduction to Computer Aided Drafting	3
GC 141	Digital Imaging/Photoshop II	3
GC 142	Digital Imaging/Photoshop III	3
GC 157	Advanced Illustrator	3
GC 182	Digital Prepress and Press II	3
GC 185	Advanced Offset Press	3
GC/R GC 202	Web Page Layout I	3
GC/R GC 249	Page Layout and Design II	3
JOUR 105	Newspaper Production	3
PHOT 100	Elementary Photography	3.5
CE 100*	Cooperative Education	1,2,3,4

**TOTAL UNITS** **28-31**

\*Cooperative Education must be related to this major.

## Graphic Communications Emphasis in Management

Prepares students to pursue employment in the printing industry as supervisors, foremen, production managers, estimators, salespersons, and plant operators.

The 18 units of Program Requirements are the same for Graphic Communications Emphasis in Electronic Publishing, Graphic Communications Emphasis in Management, and Graphic Communications Emphasis in Production. Students may complete one or more of these programs by completing the Program Requirements, Emphasis Requirements and Electives listed for each program.

### A.A. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT

**Program Requirements**

	Units
GC 100 or Graphic Communications	3
GC 101 History of Graphic Communications	3
GC 105 Layout for Offset Lithography	3
GC/R GC 140 Digital Imaging/Photoshop I	3
GC/R GC 149 Page Layout and Design I	3
GC 180 Digital Prepress and Press I	3
GC/R GC 248 Acrobat for Print	3

**Emphasis Requirements (6 units)**

CSIS 105	Computer Concepts/Microcomputer Apps	3
GC 182	Digital Prepress and Press II	3

**Electives (Select two courses, 4 – 7 units)**

BUS 105	Bookkeeping Fundamentals	3
BUS 115	Business Law	3
BUS 125	Business English	3
BUS 140	Selling for Business	3
BUS 155	Marketing	3
BMGT 105	Small Business Management	3
BMGT 115	Organizational Theory and Design	3
GC 141	Digital Imaging/Photoshop II	3
GC 185	Advanced Offset Press	3
GC/R GC 249	Page Layout and Design II	3
CE 100*	Cooperative Education	1,2,3,4

**TOTAL UNITS** **28 – 31**

\*Cooperative Education must be related to this major.

## Graphic Communications Emphasis in Production

Prepares students to pursue employment in the printing industry in prepress, press, and finishing processes.

The 18 units of Program Requirements are the same for Graphic Communications Emphasis in Electronic Publishing, Graphic Communications Emphasis in Management, and Graphic Communications Emphasis in Production. Students may complete one or more of these programs by completing the Program Requirements, Emphasis Requirements and Electives listed for each program.

### A.A. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT

**Program Requirements (18 units)**

	Units
GC 100 or Graphic Communications	3
GC 101 History of Graphic Communications	3
GC 105 Layout for Offset Lithography	3
GC/R GC 140 Digital Imaging/Photoshop I	3
GC/R GC 149 Page Layout and Design I	3
GC 180 Digital Prepress and Press I	3
GC/R GC 248 Acrobat for Print	3

**Emphasis Requirements (6 units)**

GC 182	Digital Prepress and Press II	3
GC 185	Advanced Offset Press	3

**Electives (Select two courses, 4 – 7.5 units)**

BUS 125	Business English	3
CSIS 105	Computer Concepts/ Microcomputer Applications	3
GC/R GC 152	Desktop Publishing with Illustrator	3
GC 141	Digital Imaging/Photoshop II	3
JOUR 105	Newspaper Production	3
JOUR 205	Advanced Newspaper Production	3
PHOT 100	Elementary Photography	3.5
CE 100*	Cooperative Education	1,2,3,4

**TOTAL UNITS** **28 – 31.5**

\* Cooperative Education must be related to this major.

## Interactive Media Design

Prepares students with specific skills necessary for employment in the field of multimedia design and production. Students may choose an emphasis in either 3D modeling and animation, which emphasizes production skills and authoring systems, or multimedia design, which emphasizes content development and visual design of multimedia productions. Both areas of emphasis collaborate on an actual multimedia production.

### A.A. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT

## Emphasis in 3D Modeling and Animation

**Program Requirements**

	Units	
ARTI 100	Introduction to Illustration	3
ARTI 246	Digital 3D Design and Modeling	3
ARTI 247	Digital 3D Design and Animation	3
DT 180	3D Studio Max-Intro to 3D Modeling/Animation	3
DT 182	3D Studio Max-Adv 3D Modeling/Animation	3
GC/R GC 140	Digital Imaging/Photoshop I	3
GC 204	Motion Graphics for Multimedia-A	3

**Electives (Select two courses)**

ART 241	Computer Graphics	3
ART 248	Character Animation	1.5
ARTD 150	Digital Concepts/Techniques in Art	3
ARTD 220	Motion Design	3

DT/R DT 128	SolidWorks Intro 3D Design and Presentation	3
DT 184	Real Time 3D Technical/Game Animation	2
GC 142	Digital Imaging/Photoshop III	3
GC 201	Intermediate Multimedia	3
ENTT/RTV 120	Basic Television Production	3
RTV 124	Staging and Lighting for Television	3

**TOTAL UNITS** **24.5 – 27**

Emphasis in Multimedia Design

**Program Requirements**

		<b>Units</b>
ARTD 100	Graphic Design I	3
ARTD 220	Motion Design	3
ARTI 247	Digital 3D Design and Animation	3
GC 142	Digital Imaging/Photoshop III	3
GC/R GC 200	Introduction to Multimedia	3
GC 201	Intermediate Multimedia	3
GC 204	Motion Graphics/Multimedia-A	3

**Electives (Select two courses)**

ART 197G	Topics in Art – Computer Art	3
ARTD 150	Digital Concepts and Techniques in Art	3
ARTI 246	Digital 3D Design/Modeling	3
DT 180	3D Studio Max-Intro to 3D Modeling/Animation	3
DT 182	3D Studio Max-Adv 3D Modeling/Animation	3
GC 100	Graphic Communications	3
GC/R GC 140	Digital Imaging/Photoshop I	3
GC/R GC 152	Desktop Publishing with Illustrator	3
GC 197E	Topics in Multimedia	3
GC/R GC 202	Web Page Layout I	3
GC 206	Web Multimedia	3
MUS 180	Computer Music I	3
RTV 170	Introduction to Video Editing	3

**TOTAL UNITS** **27**

Interactive Media Design A.A. Degree or Certificate of Achievement is also listed in Art and in Drafting Technology.

**Interactive Web Multimedia and Audio**

This program is directed at interactive methods of Web production that include creation of audio for the Internet. Students will learn techniques and software to create animated and interactive Web sites and audio production for the Internet.

**A.A. DEGREE MAJOR OR  
CERTIFICATE OF ACHIEVEMENT**

**Program Requirements**

		<b>Units</b>
GC 144	Web Graphics	3
GC/R GC 200	Introduction to Multimedia	3
GC/R GC 202	Web Page Layout I	3
GC 206	Web Multimedia	3
GC 208	Web Motion Graphics I	3
GC 209	Web Motion Graphics II	3
GC 223	Audio for the Internet	3
GC 229	Interactive Streaming Media	3

**Electives (select 2 courses)**

GC 104	Motion and Sound	3
GC/R GC 140	Digital Imaging / PhotoShop I	3
GC 141	Digital Imaging / PhotoShop II	3
GC 142	Digital Imaging / PhotoShop III	3
GC 165	Digital Video Design	3
GC 204	Motion Graphics for Multimedia–A	3
GC 207	Motion Graphics for Multimedia–B	3
GC 211	Web Motion Graphics III	3
GC 212	Web Page Layout II	3
GC 215	Designing for Web Standards I	3
GC 219	Designing for Web Standards II	3
GC 236	Flash Game Design	3

MUS 180	Computer Music I	3
RTV 230	Digital Audio with Pro Tools	3

**TOTAL UNITS** **30**

**Internet**

As the vast web of global and local information networks grow, several skills and forms of literacy are becoming essential for anyone who wants to obtain the full benefits of the Communications Age.

An individual's ability to capitalize on the opportunities offered by interactive communications requires mastery of these information and communication conveniences:

- **Navigational skills** - The ability to move smoothly among arrays of autonomous and globally interconnected information, contacts, forums, and discussion groups in order to locate and connect to information and expertise from relevant sources.
- **Information literacy** - An understanding of which information is most useful, relevant, and reliable, as well as the ability to analyze, distill, integrate, compose, and classify information to create knowledge.
- **Distribution skills** - Frameworks for rethinking methods of packaging, presenting, providing access, and disseminating information and knowledge in this new medium.
- **Communications literacy** - Integrating new forms of information, knowledge, and message development into evolving patterns of organizational and interpersonal communication.

This certificate offers preparation skills for the above areas of emphasis involving the Internet.

**Emphasis in Graphic Communication**

**A.A. DEGREE MAJOR OR  
CERTIFICATE OF ACHIEVEMENT**

**Program Requirements**

		<b>Units</b>
BUS 157	E-Commerce	3
CSIS/R CSIS 137	Web Site Development with XHTML	2
GC 144	Web Graphics	3
GC/R GC 202	Web Page Layout I	3
GC/R GC 203	Interactive Publishing with PDFs	3
GC 206	Web Multimedia	3
GC 208	Web Motion Graphics I	3
GC 212	Web Page Layout II	3
GC 215	Designing for Web Standards I	3
GC 217 or GC 229	Online Store Design I Interactive Streaming Media	3

**TOTAL UNITS** **29**

**Internet – Emphasis in Business**

**A. A. Degree Major or Certificate of Achievement**

(See Business Education)

**Internet Publisher**

Prepares students with specific skills necessary for entry-level employment in the field of Web design and production. Students will be able to design and produce simple Websites that have text, graphics, and multimedia.

**CERTIFICATE OF PROFICIENCY**

Program Requirements		Units
GC 144	Web Graphics	3
GC/R GC 202	Web Page Layout I	3
GC 206	Web Multimedia	3
GC 215	Designing for Web Standards I	3
<b>TOTAL UNITS</b>		<b>12</b>

**New Media Compositing,  
Authoring and Distribution**

This program is directed at alternative methods of digital video compilation and release. Students will learn techniques and software to compile and composite digital video for release on CD ROM, DVD, and the Internet.

**A.A. DEGREE MAJOR OR  
CERTIFICATE OF ACHIEVEMENT**

Program Requirements		Units
GC/R GC 142	Digital Imaging/PhotoShop III	3
GC 165	Digital Video Design	3
GC/R GC 200	Introduction to Multimedia	3
GC 201	Intermediate Multimedia	3
GC 204	Motion Graphics for Multimedia - A	3
GC 207	Motion Graphics for Multimedia - B	3
GC 213	Motion Graphics Production and Compositing	3
GC 229	Interactive Streaming Media	3
<b>Electives (2 course minimum required, 6 units total)</b>		
ARTD 220	Motion Design	3
ARTI 246	Digital 3D Design and Modeling	3
ARTI 247	Digital 3D Design and Animation	3
GC 101	History of Graphic Communications	3
GC/R GC 140	Digital Imaging/PhotoShop I	3
GC 141	Digital Imaging/PhotoShop II	3
GC/R GC 152	Desktop Publishing with Illustrator	3
GC/R GC 202	Web Page Layout I	3
GC 212	Web page Layout II	3
GC 206	Web Multimedia	3
GC 208	Web Motion Graphics I	3
GC 209	Web Motion Graphics II	3
GC 211	Web Motion Graphics III	3
GC 215	Designing for Web Standards I	3
GC 219	Designing for Web Standards II	3
GC 223	Audio for the Internet	3
GC 236	Flash Game Design	3
GC 295	Directed Studies in Graphic Communications	3
GC 296	Special Projects	3
RTV 170	Introduction to Video Editing	3
RTV 270	Digital Video Editing	3
RTV 230	Digital Audio with Pro Tools	3
RTV 275	Avid Editing for Television and Film	3
<b>TOTAL UNITS</b>		<b>30</b>

**Screen Printer**

Recent advances in technology have allowed screen printing to compete on a large scale with other printing processes. Productive, challenging careers are growing in the screen printing field at a steady rate. Palomar's screen printing process classes prepare students for duties in project planning, copy preparation, camera operation, screen preparation, electronic prepress, stencil making, screen printing, and sales.

**CERTIFICATE OF PROFICIENCY**

Program Requirements		Units
GC/R GC 170	Screen Printing	3

GC/R GC 172	Textile Screen Printing	3
GC 174	Commercial Screen Printing	3

**TOTAL UNITS** **9**

**Screen Printing**

Prepares students for entry-level positions in project planning, copy preparation, camera operation, screen preparation, stencil making, printing, and sales.

Due to recent advances in screen printing technology, screen printing is becoming very commercialized. These breakthroughs have allowed screen printing to compete on a large scale with other processes. Productive, challenging careers are growing in the screen printing field at a steady rate.

**A.A. DEGREE MAJOR OR  
CERTIFICATE OF ACHIEVEMENT**

Program Requirements		Units
BMGT 105	Small Business Management	3
GC 105	Layout for Offset Lithography	3
GC/R GC 140	Digital Imaging/Photoshop I	3
GC/R GC 152	Desktop Publishing with Illustrator	3
GC/R GC 170	Screen Printing	3
GC/R GC 172	Textile Screen Printing	3
GC 174	Commercial Screen Printing	3
GC 180	Digital Prepress and Press I	3

**Electives (Select one course)**

GC 142	Digital Imaging/Photoshop III	3
GC 157	Advanced Illustrator	3
GC 182	Digital Prepress and Press II	3
CE 100	Cooperative Education	1,2,3,4

**TOTAL UNITS** **25 - 28**

**Video Game Artist**

This certificate program introduces students to the video game industry, game design, and the creation of both 2D and 3D artwork for video games.

**CERTIFICATE OF PROFICIENCY**

Program Requirements		Units
CSIS 241	Overview of the Video Game Industry	4
CSIS 242	Game Design	4
ART 241 or	Computer Graphics	
GC/R GC140 or	Digital Imaging/Photoshop I	
GC 141 or	Digital Imaging/Photoshop II	
GC 142	Digital Imaging/Photoshop III	3
ARTI 246 or	Digital 3D Design and Modeling	
DT 180 or	3D Studio Max – Intro 3D Modeling/Animation	
DT 182	3D Studio Max – Adv 3D Modeling/Animation	3
ARTD 220 or	Motion Design	
ARTI 247 or	Digital 3D Design and Animation	
DT 184 or	Real Time 3D Technical/Game Animation	
GC 204	Motion Graphics for Multimedia-A	2,3

**TOTAL UNITS** **16**

Video Game Artist Certificate of Proficiency is also listed under Computer Science and Information Systems.

**Web Data Base Design**

The Web site developer must present the complexity and volume of information so that the site's visitor may make decisions quickly and accurately. Data-driven dynamic pages are also interactive, allowing the visitor to choose the information that they would like to see. The increasingly sophisticated site development for online stores and multimedia, for example, requires a range of diverse and multifaceted skills from database design, computer graphics, Web design, site design and architecture, graphical user interface design, to cross-platform competence.

The World Wide Web, as a graphical user interface, offers new career opportunities to graphic designers who have the skills to maintain sites that contain large amounts of data that changes frequently. The ability to package, share, and manage data to consumers across the Internet is in high demand. The Web Data Base Design certificate prepares for employment in dynamic business environments that need large-scale as well as smaller sites.

**CERTIFICATE OF PROFICIENCY**

Program Requirements		Units
GC 212	Web Page Layout II	3
GC 215	Designing for Web Standards I	3
GC 216	Web Data Base Design I	3
GC 217 or	Online Store Design I	
GC 218	Online Store Design II	3
GC 226	Web Data Base Design II	3

Elective Courses (Select one course)		Units
BUS 180	Access for Business	1
CSIS 173	Designing Microsoft SQL Server Database	3
CSIS 268	Active Server Pages	3
GC 154	Preparing Web Graphics	1
GC 164	Interactive Web Graphics	1
GC 290	Copyright for Graphic Designers/Web Developers	1
GC 291	Contracts for Graphic Designers/Web Developers	1
GC 292	Legal Issues Graphic Designers/Web Developers	3

**TOTAL UNITS 16-18**

**Web Graphics**

Designed to meet the increasing needs of organizations and businesses that publish on the World Wide Web. Specific skills for the Web Graphics certificate include typography, visual acuity, graphic design, Web color, and file formats. The certificate prepares students to gain competence with the basic applications used in industry for digital graphics and Web publishing. Teamwork, problem solving, workflow and production process, communication and creativity are core competencies. Upon completion of the certificate, the student may find a job as a Web production artist, graphic production assistant, or graphic designer.

**CERTIFICATE OF PROFICIENCY**

Program Requirements		Units
GC 144	Web Graphics	3
GC 154 or	Preparing Web Graphics	
GC 164	Interactive Web Graphics	1
GC/R GC 202	Web Page Layout I	3
GC 206	Web Multimedia	3
GC 208	Web Motion Graphics I	3
GC 212	Web Page Layout II	3
GC 232	Web Accessibility Design	1

**TOTAL UNITS 17**

**Web Motion Graphics**

Prepares students with specific skills necessary for employment in the field of Interactive Web multimedia design and production. A high level of skill and time are needed to create professional motion graphics. Specific skills include an attention to detail, knowledge of various illustration and animation software, technical and analytical problem solving, and visual acuity. Teamwork, creativity, communication, understanding of the production process and interactivity are core competencies. Typical job opportunities are in entertainment, business, corporate, and educational industries.

**CERTIFICATE OF PROFICIENCY**

Program Requirements		Units
GC 164	Interactive Web Graphics	1
GC/R GC 202	Web Page Layout I	3
GC 206	Web Multimedia	3
GC 208	Web Motion Graphics I	3
GC 209	Web Motion Graphics II	3
GC 229	Interactive Streaming Media	3

**TOTAL UNITS 16**

**COURSE OFFERINGS**

**GC 100 Graphic Communications (3)**

*3 hours lecture*  
**Transfer acceptability:** CSU  
 Explores the history and theory of effective mass communication from prehistoric cave art, to invention of the printing press, and modern graphic communication techniques using computers and the Internet. The class examines communication models revolving around imagery, type, delivery systems, and technology. The students will be able to understand and establish the effects of a clear visual message. Learning modules include slideshow, field trips, guest speakers, discussion, lectures and hands-on application with computers and the Internet to promote an understanding of graphic communications and visual messages and their impact on society.

**GC 101 History of Graphic Communications (3)**

*3 hours lecture*  
**Transfer acceptability:** CSU  
 This course focuses on the history and evolution of graphic communications from prehistoric pictographs to present day graphic design. Topics include the invention of writing and the creation of alphabets. Other topics include world influences on print and aesthetic design, and an understanding of the stylistic, social, political, economic, and historical events as related to communication and graphic design. The emphasis is on art movements, schools of thought, influential individuals, and technology as they interrelate with the history of graphic arts. Historical topics are applied to photography, print media graphics and motion graphics. Field trips to museums and guest speakers will be integrated into the topics as appropriate.

**GC 104 Motion and Sound (3)**

*6 hours lecture/laboratory*  
**Note:** May be taken 4 times  
 Introduction to combining motion with sound for multimedia. Includes an overview of motion graphics and sound design for the multimedia industry. Course will consider current trends in motion graphics and soundtracks for film titles, television programs and advertising, interactive media and experimental works. This is a hands-on course using digital tools for creating and editing audio and motion graphics.

**GC 105 Layout for Offset Lithography (3)**

*6 hours lecture/laboratory*  
**Note:** May be taken 4 times  
**Transfer acceptability:** CSU  
 Planning and layout of visual communication for offset lithography. Basic computer applications for layout of business communication set or eight page booklet using type, color, images, paper, and the lithographical production processes to complete the package. Emphasis is on practical application.

**GC 132 Desktop Publishing with Illustrator-Part I (1.5)**

*3 hours lecture/laboratory*  
**Note:** May be taken 4 times  
 Introduction to electronic layout on the microcomputer. Illustrator will help the student generate new images or convert bitmapped images in PostScript. Quality levels needed for electronic output will be evaluated.

**GC 133 Desktop Publishing with Illustrator-Part II (1.5)**

3 hours lecture/laboratory

**Recommended preparation:** GC 132**Note:** May be taken 4 times

Introduction to electronic layout on the microcomputer. Illustrator will help the student generate new images or convert bitmapped images in PostScript. Quality levels needed for electronic output will be evaluated. Topics included: printing, separations, working with graphics from multiple applications with Illustrator; and production of Web graphics.

**GC 140 Digital Imaging/Photoshop I (3)**

6 hours lecture/laboratory

**Note:** Cross listed as R GC 140; may be taken 4 times**Transfer acceptability:** CSU

The study of digital imaging and editing with Adobe Photoshop for visual, pictorial and graphic use in all media. Emphasis on creating and enhancing imagery for effective use in mass communication mediums.

**GC 141 Digital Imaging/Photoshop II (3)**

6 hours lecture/laboratory

**Transfer acceptability:** CSU

The concepts of intermediate digital imaging with Adobe Photoshop for visual, pictorial and graphic use in all media. Effective image creation for motion graphics, publications and internet for effective visual communications.

**GC 142 Digital Imaging/Photoshop III (3)**

6 hours lecture/laboratory

**Recommended preparation:** GC/R GC 140**Transfer acceptability:** CSU

The concepts of advanced digital imaging with Adobe Photoshop for creating and preparing images for electronic distribution. Advanced methods of editing in all venues of digital media for visual communications.

**GC 144 Web Graphics (3)**

6 hours lecture/laboratory

**Recommended preparation:** GC/R GC 140 and GC/R GC 202**Note:** May be taken 4 times**Transfer acceptability:** CSU

Design and production of Web page graphics using current graphics editing applications, for inclusion in Web pages and other display media. Mechanics for image production as well as methodologies for image size reduction, scanning of existing images, GIF animation and JavaScript rollovers. GIF and JPEG file formats, image resolution, color depth. Elements of a Graphical User Interface.

**GC 145 Photoshop Digital Imaging – Part I (1.5)**

3 hours lecture/laboratory

**Note:** May be taken 4 times

Introduction to digital imaging systems with Photoshop for Graphic Communications and Multimedia. Emphasis on basic and intermediate features and functions of Photoshop with a primary focus on preparing and using optimized images for the web. Special projects facilitate the needs of more advanced students.

**GC 146 Photoshop Digital Imaging – Part II (1.5)**

3 hours lecture/laboratory

**Recommended preparation:** GC 145**Note:** For intermediate levels; may be taken 4 times.

A hands-on introduction to digital imaging systems with Photoshop for Graphic Communications and Multimedia. Emphasis on basic and intermediate features and functions of Photoshop with a primary focus on preparing and using optimized images for the web. Special projects facilitate the needs of more advanced students.

**GC 147 Intermediate Photoshop – Part I (1.5)**

3 hours lecture/laboratory

**Recommended preparation:** GC/R GC 140, or GC 145 or 146**Note:** May be taken 4 times

This Intermediate Photoshop class is being created to allow the existing class to be taught on Camp Pendleton. This is an intermediate level of Photoshop focusing on digital art and graphics with an emphasis on website development. A work-

ing knowledge of Photoshop is suggested as well as a basic knowledge of using computers (Mac. PC). Students will produce digitally manipulated art and website design to be used print and/or digital portfolio presentations.

**GC 148 Intermediate Photoshop – Part II (1.5)**

3 hours lecture/laboratory

**Prerequisite:** GC 147**Recommended preparation:** GC/R GC 140, or GC 145 or 146**Note:** May be taken 4 times

This is an intermediate level of Photoshop focusing on digital art and graphics with an emphasis on website development. A working knowledge of Photoshop is suggested as well as a basic knowledge of using computers (Mac. PC). Students will produce digitally manipulated art and website design to be used print and/or digital portfolio presentations.

**GC 149 Page Layout and Design I (3)**

6 hours lecture/laboratory

**Note:** Cross listed as R GC 149; may be taken 4 times

Introduction to electronic document design and page layout, electronic composition, text and graphics entry with computers. Students will create a variety of projects including but not limited to: brochures, flyers, and newsletters.

**GC 152 Desktop Publishing with Illustrator (3)**

6 hours lecture/laboratory

**Note:** Cross listed as R GC 152; may be taken 4 times**Transfer acceptability:** CSU

Introduction to electronic layout on the microcomputer. Illustrator will help the student generate new images or convert bitmapped images into PostScript. Quality levels needed for electronic output will be evaluated.

**GC 154 Preparing Web Graphics (1)**

2 hours lecture/laboratory

**Recommended preparation:** GC/R GC 140 and/or GC/R GC 152 and/or GC/R GC 202**Note:** May be taken 4 times**Transfer acceptability:** CSU

Hands-on course to produce optimized graphics for the Web with applications such as Adobe's ImageReady or Macromedia's Fireworks, cross-platform production environments: edit bitmap and vector graphics; format text; select Web-safe color; simple animation; generate HTML and JavaScript automatically; integrate with other Web production applications.

**GC 157 Advanced Illustrator (3)**

6 hours lecture/laboratory

**Prerequisite:** GC/R GC 152**Note:** May be taken 4 times**Transfer acceptability:** CSU

Advanced concepts and methods of Illustrator and its use in graphic illustrations and problem solving. Software capabilities for use in preparing computer files for publishing to digital and electronic delivery systems.

**GC 164 Interactive Web Graphics (1)**

2 hours lecture/laboratory

**Recommended preparation:** GC/R GC 140 and/or GC/R GC 152 and/or GC 154 and/or GC/R GC 202**Note:** May be taken 4 times**Transfer acceptability:** CSU

Hands-on course to produce optimized graphics for the Web with applications such as Adobe's ImageReady or Macromedia's Fireworks, cross-platform production environments: design complex buttons and navigation bars, image maps, slicing complex graphics, animation, batch processing, and scripting; generate HTML and JavaScript automatically; integrate with other Web Production applications.

**GC 165 Digital Video Design (3)**

6 hours lecture/laboratory

**Recommended preparation:** GC/R GC 140**Note:** May be taken 3 times

Explores project planning, setup, editing and output of Digital Video. Incorporates sound, graphics, 2D animation and text for full-screen, web, CD-ROM, or DVD

playback. Projects and assignments utilize transitions, superimposing, transparency and keying along with video, audio and other special effects.

**GC 170 Screen Printing (3)**  
6 hours lecture/laboratory

**Note:** Cross listed as R GC 170; may be taken 4 times

**Transfer acceptability:** CSU

Screen printing theory and application of layout and image preparation, computer applications, stencil methods, process camera and basic screen printing techniques. Practical application is stressed.

**GC 172 Textile Screen Printing (3)**  
6 hours lecture/laboratory

**Note:** Cross listed as R GC 172; may be taken 3 times

**Transfer acceptability:** CSU

Theory and applications of screen printing for textile use. Copy preparation for multicolor reproduction, color matching, ink selection, and mesh and stencils for material compatibility.

**GC 174 Commercial Screen Printing (3)**  
6 hours lecture/laboratory

**Note:** May be taken 4 times

**Transfer acceptability:** CSU

Commercial screen printing applications. Preparation of mechanicals using close registration and printing on standard and unusual surfaces. Color, mechanical process, and quality control standards in screen printing.

**GC 180 Digital Prepress and Press I (3)**  
6 hours lecture/laboratory

**Note:** May be taken 4 times

**Transfer acceptability:** CSU

Practical applications of electronic prepress and introduction to offset press operation. The theory and practical applications of conventional and digital prepress including job layout, page impositions, templates and press signatures, plus small format press operation to include control and setup of feeder and delivery units, press controls, direct to plate technology, ink and chemistry as related to the offset press.

**GC 182 Digital Prepress and Press II (3)**  
6 hours lecture/laboratory

**Note:** May be taken 4 times

**Transfer acceptability:** CSU

Set up and control of printing on small offset presses. Examines offset chemistry, kinds of offset plates, inks, and offset press problems. Theory and practical applications of conventional and digital prepress.

**GC 185 Advanced Offset Press (3)**  
6 hours lecture/laboratory

**Recommended preparation:** GC 182

**Note:** May be taken 4 times

**Transfer acceptability:** CSU

Advanced work on larger format offset equipment focusing on sheet control, register, ink and water control, and digital imposition.

**GC 197A Topics in Graphic Communications (.5-4)**

Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture, laboratory, or lecture/laboratory may be scheduled by the department. Refer to Class Schedule.

**Note:** Cross listed as R GC 197A; may be taken 3 times

**Transfer acceptability:** CSU

Short term or special topic course, lecture or laboratory courses in various topics in Graphic Communications.

**GC 197B Graphic Communications Topics in Digital Imaging (.5-5)**

Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture, laboratory, or lecture/laboratory may be scheduled by the department. Refer to Class Schedule.

**Note:** May be taken 4 times

**Transfer acceptability:** CSU

Graphic Communications topics in digital imaging. See Class Schedule for specific topic offered. Course title will designate subject covered.

**GC 197C Graphic Communications Topics in Electronic Publishing (.5-5)**

Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture, laboratory, or lecture/laboratory may be scheduled by the department. Refer to Class Schedule.

**Note:** May be taken 4 times

**Transfer acceptability:** CSU

Graphic Communications topics in electronic publishing. See Class Schedule for specific topic offered. Course title will designate subject covered.

**GC 197D Graphic Communications Topics in Internet (.5-5)**

Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture, laboratory, or lecture/laboratory may be scheduled by the department. Refer to Class Schedule.

**Note:** May be taken 4 times

**Transfer acceptability:** CSU

Graphic Communications topics in Internet. See Class Schedule for specific topic offered. Course title will designate subject covered.

**GC 197E Graphic Communications Topics in Multimedia (.5-5)**

Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture, laboratory, or lecture/laboratory may be scheduled by the department. Refer to Class Schedule.

**Note:** May be taken 4 times

**Transfer acceptability:** CSU

Graphic Communications topics in multimedia. See Class Schedule for specific topic offered. Course title will designate subject covered.

**GC 197F Graphic Communications Topics in Graphic Processes (.5-5)**

Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture, laboratory, or lecture/laboratory may be scheduled by the department. Refer to Class Schedule.

**Note:** May be taken 4 times

**Transfer acceptability:** CSU

Graphic Communications topics in graphic processes. See Class Schedule for specific topic offered. Course title will designate subject covered.

**GC 200 Introduction to Multimedia (3)**  
6 hours lecture/laboratory

**Note:** Cross listed as R GC 200; may be taken 4 times

**Transfer acceptability:** CSU

Introduction to multimedia authoring software combining text, graphics, sound, animation, video clips and user interface to produce effective visual presentations.

**GC 201 Intermediate Multimedia (3)**  
6 hours lecture/laboratory

**Prerequisite:** GC 200

**Recommended preparation:** GC/R GC 140 and GC141

**Note:** May be taken 4 times

**Transfer acceptability:** CSU

Strategies and techniques for designing successful user multimedia interface. There will be emphasis on usability and design issues, incorporation of underlying metaphors, screen design, and navigational styles. Authoring systems, video compositing, digital imaging and audio editing applications will be explored.

**GC 202 Web Page Layout I (3)**  
6 hours lecture/laboratory

**Note:** Cross listed as R GC 202; may be taken 4 times

**Transfer acceptability:** CSU

A hands-on introduction to page layout for the Internet. Typographic considerations, screen layout, graphical interfaces, and structured page design for effective Internet communications.

- GC 203 Interactive Publishing with PDF's (3)**  
*6 hours lecture/laboratory*  
**Note:** Cross listed as R GC 203; may be taken 4 times  
**Transfer acceptability:** CSU  
 This hands-on course looks at a comprehensive range of print, Web, and multimedia features in Adobe Acrobat for creating and distributing electronic documents reliably and securely. Topics and projects include e-books, forms, editing, prepress, accessibility, capture, and a variety of methods to convert and repurpose documents.
- GC 204 Motion Graphics for Multimedia-A (3)**  
*6 hours lecture/laboratory*  
**Recommended preparation:** GC/R GC 140  
**Note:** May be taken 4 times  
**Transfer acceptability:** CSU  
 Explores project planning, setup, execution, and output of motion-based graphics. Incorporates exploration and integration of sound, graphics, digital video, 2-D animation, and text for multimedia.
- GC 206 Web Multimedia (3)**  
*6 hours lecture/laboratory*  
**Prerequisite:** GC/R GC 202  
**Recommended preparation:** GC/R GC 140 and GC 200  
**Note:** May be taken 4 times  
**Transfer acceptability:** CSU  
 Open discussion of current technologies, social issues, and design theory directly related to multimedia for the Internet and the World Wide Web. Experimental and practical application of multimedia in graphical user interface and user navigation design via assigned class projects.
- GC 207 Motion Graphics for Multimedia-B (3)**  
*6 hours lecture/laboratory*  
**Prerequisite:** GC/R GC 140  
**Note:** May be taken 4 times  
**Transfer acceptability:** CSU  
 Exploration of concepts, design and development of digital video production and editing skills as they relate to CD Rom/DVD, Internet, and Digital Video Tape.
- GC 208 Web Motion Graphics I (3)**  
*6 hours lecture/laboratory*  
**Prerequisite:** GC/R GC 202  
**Recommended preparation:** GC 206  
**Note:** May be taken 4 times  
**Transfer acceptability:** CSU  
 Introduction of core concepts: vectors, the Stage, Scenes, Timelines, Layers, Keyframes, Shapes, Symbols (Graphic, Button, Movie Clip), Tweening, native drawing tools and external editors, frame-by-frame animation, Actions and Actionscript. Development of basic skills in web motion graphics. Exporting and embedding SWF files in Web pages. Macromedia's Flash will be used to create dynamic visual presentations with auditory components to communicate more effectively on the Web.
- GC 209 Web Motion Graphics II (3)**  
*6 hours lecture/laboratory*  
**Prerequisite:** GC 208  
**Recommended preparation:** GC/R GC 202  
**Note:** May be taken 4 times  
**Transfer acceptability:** CSU  
 Development of intermediate skills in web motion graphics: introduction of object-oriented design as applied to dynamic animation presentations; communication between graphical elements and instances; use of scripting and variables; creation of sound objects; use of components to improve efficiency; using Dynamic Text and ActionScript. Integrating digital audio and video with Flash presentations. Macromedia's Flash will be used to create dynamic visual presentations with audio and video assets to communicate more effectively on the Web.
- GC 211 Web Motion Graphics III (3)**  
*6 hours lecture/laboratory*  
**Prerequisite:** GC 209  
**Recommended preparation:** GC/R GC 202 and GC 216  
**Note:** May be taken 4 times  
**Transfer acceptability:** CSU  
 Dynamic Web content - explore the creation of dynamic Flash presentations. Skinnable components and presentations. Incorporating server-side technologies: Flash as a front-end to a database; using Flash Communications Server and ColdFusion MX to enable rich internet application capabilities. Production of audio and digital video for Flash; integration of non-embedded media.
- GC 212 Web Page Layout II (3)**  
*6 hours lecture/laboratory*  
**Prerequisite:** GC/R GC 202 or GC 215  
**Note:** May be taken 4 times  
**Transfer acceptability:** CSU  
 Multimedia web site design and production using advanced WYSIWYG editor that permits editing hypertext markup language (HTML) and generation of JavaScript and animation within the application. Includes mechanics for site production as well as methodologies for project planning and management.
- GC 213 Motion Graphics Production and Compositing (3)**  
*6 hours lecture/laboratory*  
**Prerequisite:** GC 204 or 207  
**Recommended preparation:** GC/R GC 140 or GC 165  
**Note:** May be taken 4 times  
 This course will be a "cap course" in which the student combines skills learned in multiple disciplines. For example the student will combine video skills learned in Graphic Communications and RTV with skills learned in ART or CAD by compositing a video that incorporates 3D rendered characters with live video footage. The student will complete the work by preparing it for publication using VHS, DVD, and on-line Streaming technologies.
- GC 214 Designing Data Bases Visually (3)**  
*6 hours lecture/laboratory*  
**Note:** May be taken 4 times  
**Transfer acceptability:** CSU  
 Organize and track people, projects, images and information in visually designed cross-platform relational data bases using graphic tools via wizards, templates and custom capabilities. Lay out powerful forms for the end user implementing graphical user interface standards. Publish for print and Web and intranet. Share and integrate secure data with workgroups across networks or other applications. Course is hands-on and will feature such applications as FileMaker Pro.
- GC 215 Designing for Web Standards I (3)**  
*6 hours lecture/laboratory*  
**Recommended preparation:** GC/R GC 202  
**Note:** May be taken 4 times  
**Transfer acceptability:** CSU  
 Web site design and production using the current standards of the hypertext markup language (HTML) and other advanced tools (multimedia applications and Java Script, Java, etc.). Use of HTML editors for site authoring and mechanics as well as methodologies for project planning and management.
- GC 216 Web Data Base Design I (3)**  
*6 hours lecture/laboratory*  
**Recommended preparation:** GC/R GC 202 with Dreamweaver or equivalent knowledge  
**Note:** May be taken 4 times  
**Transfer acceptability:** CSU  
 Hands-on course for creating Web pages that draw dynamic content from databases. Design and create a simple database for use on the Web. Create Web forms that add, modify or delete records from a database. Plan and implement a Web application using modern Web design tools such as Dreamweaver.

- GC 217 Online Store Design I (3)**  
*6 hours lecture/laboratory*  
**Prerequisite:** GC/R GC 202 or GC 215  
**Note:** May be taken 4 times  
**Transfer acceptability:** CSU  
 Design of interactive commercial web sites with emphasis on online shopping cart and database creation and management. Hands-on production of an online store. Perspective through web store case studies and models. Evaluation of various e-commerce solutions, security/privacy and payment options, site promotion/advertising, analysis tools and trends in appropriate web graphics, multimedia and software. Project management methods for e-commerce site life cycle.
- GC 218 Online Store Design II (3)**  
*6 hours lecture/laboratory*  
**Prerequisite:** GC 217  
**Note:** May be taken 4 times  
**Transfer acceptability:** CSU  
 Hands-on design and production of interactive commercial Web sites with emphasis on complex data-driven online shopping carts. Perspective through Web store case studies and models. Emphasis on forms production to send and dynamically display data for catalog, inventory, customers, etc. Produce components such as guest books, counters, e-mail, etc. to enhance an e-commerce site. Project Management methods for e-commerce site life cycle.
- GC 219 Designing for Web Standards II (3)**  
*6 hours lecture/laboratory*  
**Prerequisite:** GC 215  
**Note:** May be taken 4 times  
 Current standards of Web design set forth by the W3C mandate changes in the way Web designers create their Web pages. This course teaches the use of XHTML and CSS to implement Web typography and advanced Web page layouts that comply with current Web standards. Use of modern Web page layout and design tools such as Dreamweaver to aid your work flow will also be taught.
- GC 220 Introduction to Painter (3)**  
*6 hours lecture/laboratory*  
**Transfer acceptability:** CSU  
 Provides the student with the knowledge to electronically simulate natural media tool and textures. The class covers the use of Painter as an image-editing tool. Students will produce electronic images simulating the use of painting and drawing tools.
- GC 222 Advanced Painter (3)**  
*6 hours lecture/laboratory*  
**Prerequisite:** GC 220  
**Transfer acceptability:** CSU  
 Advanced concept and method of Painter and its use in image making, image editing, and problem solving. Painter applications for developing special effects, shape descriptions, Internet, and multimedia interface design for communication solutions.
- GC 223 Audio for the Internet (3)**  
*6 hours lecture/laboratory*  
**Recommended preparation:** GC 208  
**Note:** May be taken 4 times  
**Transfer acceptability:** CSU  
 Introduction to sound and audio on the World Wide Web. Topics covered include digitizing audio for the internet, audio formats, optimization techniques and bandwidth considerations. This is a hands-on class using audio editing, html, and graphics editing software. Upon completion of course, student will create and publish a website incorporating audio on the internet.
- GC 226 Web Data Base Design II (3)**  
*6 hours lecture/laboratory*  
**Prerequisite:** GC 216  
**Note:** May be taken 4 times  
**Transfer acceptability:** CSU  
 Advanced topics in the use of databases on the Web. Plan and implement an advanced Web application using robust Web database servers. Build your application using advanced Web design tools such as Dreamweaver.
- GC 229 Interactive Streaming Media (3)**  
*6 hours lecture/laboratory*  
**Recommended preparation:** GC 204 or 207  
**Note:** May be taken 3 times  
 This course explores the various aspects of interactive streaming for the web. It combines lecture, hands on lessons, exercises, projects, and group work to build skills in the interactive streaming process. Students evaluate and select streaming methods, develop and author various media, and deliver the content in appropriate formats. Particular attention is given to design, usability, and applicable uses of interactive streaming media on the web.
- GC 230 Web Page Layout I – Part I (1.5)**  
*3 hours lecture/laboratory*  
**Note:** May be taken 4 times  
 A hands-on introduction to page layout for the Internet. Typographic considerations, screen layout, graphical interfaces, graphics preparation and structured page design for effective Internet communications. The course is designed to introduce students to Web production and site maintenance; special projects facilitate the needs of more advanced students. (For beginning and intermediate levels).
- GC 231 Web Page Layout I – Part II (1.5)**  
*3 hours lecture/laboratory*  
**Note:** May be taken 4 times  
 A hands-on introduction to page layout for the Internet. Typographic considerations, screen layout, graphical interfaces, graphics preparation and structured page design for effective Internet communications. The course is designed to introduce students to Web production and site maintenance; special projects facilitate the needs of more advanced students. (For beginning and intermediate levels).
- GC 232 Web Accessibility Design (1)**  
*2 hours lecture/laboratory*  
**Note:** May be taken 4 times  
 Evaluate screen and Web design techniques to maximize accessibility by people with physical disabilities. Implement tools to convert documents to accessible formats. Produce sites that are accessible. Use various resources from the World Wide Web Consortium and publishers such as checklists, examples of code, conversion tools, test tools, etc. Review legal requirements (Americans with Disabilities Act and the Web Accessibility Initiative) for various sectors to provide fully accessible Web sites.
- GC 234 Web Page Layout & Animation with Flash – Part I (1.5)**  
*3 hours lecture/laboratory*  
**Note:** May be taken 4 times  
 A hands-on introduction to page layout for the Internet. Typographic considerations, screen layout, graphical interfaces, graphics preparation and structured page design for effective Internet communications. The course is designed to introduce students to Web production and site maintenance; special projects facilitate the needs of more advanced students. (For beginning and intermediate levels).
- GC 235 Web Page Layout & Animation with Flash – Part II (1.5)**  
*3 hours lecture/laboratory*  
**Recommended preparation:** GC 234  
**Note:** May be taken 4 times  
 A hands-on introduction to page layout for the Internet. Typographic considerations, screen layout, graphical interfaces, graphics preparation and structured page design for effective Internet communications. The course is designed to introduce students to Web production and site maintenance; special projects facilitate the needs of more advanced students. (For beginning and intermediate levels).
- GC 236 Flash Game Design (3)**  
*6 hours lecture/laboratory*  
**Prerequisite:** GC 208  
**Note:** May be taken 4 times  
 A hands-on introduction to game design using Flash 5. ActionScript for game development, screen layout, game interfaces, and structured game layout for effective game design. The course is designed to introduce students to Flash game design and concepts. Projects apply ActionScript and game layout principles. (For beginning and intermediate levels).

**GC 248 Acrobat for Print (3)**

6 hours lecture/laboratory

**Note:** Cross listed as R GC 248; May be taken 4 times**Transfer acceptability:** CSU

Hands-on instruction in creating and editing high quality, print-ready PDF files using Adobe Acrobat. This course also includes the estimating of materials and labor relative to current industry practices for the production of a printed product.

**GC 249 Page Layout and Design II (3)**

6 hours lecture/laboratory

**Recommended preparation:** GC/R GC 149**Note:** Cross listed as R GC 249; may be taken 4 times

Intermediate concepts of electronic document layout, typography, and graphics. Software capabilities in creating sophisticated graphic and type treatments.

**GC 260 Portfolio Development and Presentation (3)**

6 hours lecture/laboratory

**Prerequisite:** GC/R GC 140 and GC/R GC 152**Note:** Cross listed as RGC 260; may be taken 2 times

Students will develop a personal portfolio to showcase their graphic skills and techniques. Various resources, including the Internet, will be used to conduct a job search, develop a resume and learn interviewing techniques. Guest speakers will share industry tips. Students will practice presentation and interviewing skills, with feedback from professionals working in graphics and related industries.

**GC 290 Copyright for Graphic Designers & Web Developers (1)**

1 hour lecture

**Note:** May be taken 4 times

Copyright is an old and well codified area of law. The statutes and cases, however, have created complexities that are sometimes difficult to understand. This course covers the basics of copyright law, copyright registration, methods of informing viewers of copyright protections and liability, and the ways in which a graphic designer may enforce copyright. The damages and remedies of injunction and compensation are included.

**GC 291 Contracts for Graphic Designers & Web Developers (1)**

1 hour lecture

**Note:** May be taken 4 times

Graphic designers, whether employed by business or freelance, need to understand contract terms, negotiation, conditions, and the statutory and case law uniquely applicable to graphic design. Understanding the terms of a contract is essential to protecting the rights to use of work product and obtaining compensation. Failing to do so usually results in abuse of rights and non-compensation.

**GC 292 Legal Issues for Graphics Designers and Web Developers (3)**

3 hours lecture

This course will cover most legal issues that confront graphic designers and web developers in the day-to-day operation of the businesses. Specific legal issues will include business formation, contracts, copyright, licensing, deep linking, click wrap agreements, and the risks and benefits of self employment versus employment by a business.

**GC 295 Directed Study in Graphic Communications (1,2,3)**

3, 6, or 9 hours laboratory

**Prerequisite:** Approval of project or research by department chairperson/director**Note:** May be taken 4 times**Transfer acceptability:** CSU

Independent study for students who have demonstrated skills and/or proficiencies in Graphic Communications subjects and have the initiative to work independently on projects or research outside the context of regularly scheduled classes. Students will work under the personal supervision of an instructor.

**GC 296 Special Projects (1,2,3)**

2, 4, or 6 hours lecture/laboratory

**Note:** May be taken 4 times**Transfer acceptability:** CSU

Independent work on a specified sustained project which does not fit into the context of regularly scheduled classes. Students work from a contract agreed upon by the student and the instructor.

**Health (HE)**

Contact the Physical Education Department for further information, (760) 744-1150, ext. 2462

**COURSE OFFERINGS****HE 100 Health Education and Fitness Dynamics (3)**

3 hours lecture

**Corequisite:** HE 100L**Transfer acceptability:** CSU; UC

Individual well being will be developed through the study of the emotional, spiritual, intellectual, social, and physical qualities of health.

**HE 100L Health Performance Lab (1,1.5,2)**

3, 4.5 or 6 hours laboratory

**Corequisite:** HE 100**Transfer acceptability:** CSU; UC

Fitness lab course designed to develop and encourage positive attitude and habits with regards to Health Education and fitness dynamics. Lab activity will primarily utilize exercise equipment as it relates to cardiovascular efficiency, body composition, muscular strength and endurance and flexibility. An individual fitness profile will be established, including pre-post testing, to determine each students' fitness accomplishments.

**HE 165 Fundamentals of Nutrition (3)**

3 hours lecture

**Note:** Cross listed as FCS 165**Transfer acceptability:** CSU; UC – FCS 165, FCS 185, BIOL 185, HE 165 combined: maximum credit, one course; CAN FCS 2

The study of how food nourishes the body. Investigation of diet fads and fallacies. Eating for fitness, and planning meals for optimum health throughout the life cycle.

**HE 197 Current Topics in Health (1,2,3)**

1, 2, or 3 hours lecture

**Note:** May be taken 4 times with different subject matter**Transfer acceptability:** CSU

Current issues in health education meeting student and community educational needs dealing with the social, mental, and physical aspects of personal health. Course title will designate subject covered.

**Health Occupations**

See Emergency Medical Education, Dental Assisting, Medical Assisting, and Nursing Education

**History (HIST)**

Contact the Economics, History and Political Science Department for further information, (760) 744-1150, ext. 2412

**COURSE OFFERINGS****HIST 101 History of the United States Through Reconstruction (3)**

3 hours lecture

**Note:** This course plus History 102 meets the State requirement in American History and Institutions.

**Transfer acceptability:** CSU; UC – HIST 101 and 102 or AS 101 and 102 combined: maximum credit, one pair; CAN HIST 8; HIST 101+102=CAN HIST SEQ B

Political, economic, social, and cultural development of the American people through Reconstruction with particular emphasis on the colonial period; the Revolution; constitutional development; westward expansion with emphasis on California and frontier influences; emergence of sectionalism; the Civil War and Reconstruction.

**HIST 102 History of the United States Since Reconstruction (3)**

3 hours lecture

**Note:** This course plus History 101 meets the State requirement in American History and Institutions.

**Transfer acceptability:** CSU; UC – HIST 101 and 102 or AS 101 and 102 combined: maximum credit, one pair; CAN HIST 10; HIST 101+102=CAN HIST SEQ B

Political, economic, social, and cultural developments of the American people since Reconstruction. Emphasis will be on the westward and farm movements, industrial development, twentieth century reform movements, the United States as a world power, and civil rights. Special consideration will be given to the development of California state and local government.

**HIST 105 History of Western Civilization Through the Reformation (3)**

3 hours lecture

**Transfer acceptability:** CSU; UC; CAN HIST 2, HIST 105+106=CAN HIST SEQ A

A survey of ancient civilizations, Greece, Rome and medieval Europe, with emphasis on the heritage, ideas, attitudes, and institutions basic to Western Civilization.

**HIST 106 History of Western Civilization Since the Reformation (3)**

3 hours lecture

**Transfer acceptability:** CSU; UC; CAN HIST 4, HIST 105+106=CAN HIST SEQ A

Emergence of modern Europe, expansion of European power and influences; emphasis on cultural and intellectual trends which affect Western civilization in the Twenty-first Century.

**HIST 107 World History to 1650 (3)**

3 hours lecture

**Transfer acceptability:** CSU; UC

The growth of civilizations and the interrelationships of the peoples of Europe, Asia, Africa, and America to 1650.

**HIST 108 World History Since 1650 (3)**

3 hours lecture

**Transfer acceptability:** CSU; UC

The development of the civilizations and the interrelationships of the peoples of Europe, Asia, Africa, and America since 1650.

**HIST 110 History of the Modern Far East (3)**

3 hours lecture

**Transfer acceptability:** CSU; UC

A survey of the cultural, political, and economic trends in Eastern Asia during the Nineteenth and Twentieth Centuries; penetration and impact of the West; post World War II developments including revolution, independence, modernization, and communication.

**HIST 114 American Military History (3)**

3 hours lecture

**Transfer acceptability:** CSU; UC

Covers the American military experience from Colonial times to present.

**HIST 121 History of California (3)**

3 hours lecture

**Transfer acceptability:** CSU; UC

The history of California from the origins of the native peoples to the pres-

ent. Course focuses on the events and people who shaped the development of California with an emphasis on the many diverse cultural elements (native peoples, Hispanics, Anglo-Americans, Asians, African-Americans, Pacific Islanders, and women) involved.

**HIST 130 Women in United States History (3)**

3 hours lecture

**Transfer acceptability:** CSU; UC

A survey of the changing role, status, and contributions of women in the United States from the colonial period to the present. Their social, economic, political, and religious positions in American society are examined.

**HIST 135 American Involvement in Vietnam, 1945-1975 (3)**

3 hours lecture

**Transfer acceptability:** CSU; UC

Surveys the political decisions, and the rationales behind them, that led to and increased American presence in Vietnam; examines the domestic impact of the commitment to Vietnam; analyzes aspects of the popular culture that reflect various interpretations of the war; the effect of American involvement on the Vietnamese people and nation will be addressed, but the focus will be on the meaning of Vietnam for the American National experience.

**HIST 140 History of the Americas Through 1800 (3)**

3 hours lecture

**Note:** This course plus HIST 141 meets the State requirement in American History and Institutions.

**Transfer acceptability:** CSU; UC

Surveys the evolution of the political, economic, and social institutions of the societies of Western Hemisphere from the 14th through the 18th centuries. Examines major pre Columbian Indian Cultures, European exploration and colonization, life in the colonial Americas, and the achievement of independence by the United States. Latin America, Canada, and the United States are studied from a comparative perspective. Included is consideration of the Constitution of the United States.

**HIST 141 History of the Americas Since 1800 (3)**

3 hours lecture

**Note:** This course plus HIST 140 meets the State requirement in American History and Institutions.

**Transfer acceptability:** CSU; UC

History of the American nations in the 19th and 20th centuries with emphasis on the Latin American wars of independence, inter American relations, the foreign policy of the United States and its relation to Latin America, Canada's relations with other nations of the hemisphere, and the transition of Latin American society in the 20th century.

**HIST 150 History of Latin America To 1824 (3)**

3 hours lecture

**Transfer acceptability:** CSU; UC

A survey of the historical evolution of the peoples and states of Latin America with special attention to the indigenous states and empires of the Americas, their conquest by the Iberian nations of Europe, the creation of multi racial colonial empires, and the growth of creole nationalism which lead to the overthrow of the Iberian empires at the beginning of the 19th century.

**HIST 151 History of Latin America from Independence to the Present (3)**

3 hours lecture

**Transfer acceptability:** CSU; UC

A survey of the republics of Latin America since independence that concentrates on the political evolution of these nations and the social and economic institutions that characterize the region. Special attention will be given to the contrast between the urban and rural cultures and economies, as well as the political and economic relations of the region with the world and the United States in particular.

**HIST 152 The World War II Generation (3)***3 hours lecture***Transfer acceptability:** CSU; UC

Survey of the lives and experiences of the World War II Generation as they relate to four specific areas--the war in both the Pacific and in Europe, the Home Front, and American prisoners of war. Once each area is studied, students will have the opportunity to contrast the knowledge gained through their readings and classroom discussions with the reality of stories that focus on local representatives of the WW II Generation. Whenever possible, this will be done through panel discussion nights when community members of this generation visit the class and engage in a dialogue with students and each other on their war-time experiences.

**HIST 197 History Topics (.5-4)**

Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture, laboratory, or lecture/laboratory may be scheduled by the department. Refer to Class Schedule.

**Note:** May be taken 4 times**Transfer acceptability:** CSU; UC – Credit determined by UC upon review of course syllabus.

Topics in History. See Class Schedule for specific topic offered. Course title will designate subject covered.

**HIST 295 Directed Study in History (1,2,3)***3, 6, 9 hours laboratory***Prerequisite:** Approval of project or research by department chairperson**Note:** May be taken 4 times**Transfer acceptability:** CSU; UC – Credit determined by UC upon review of course syllabus.

Independent study for students who have demonstrated a proficiency in history subjects and have the initiative to work independently on projects or research that does not fit into the context of regularly scheduled classes. Students will work under the personal supervision of an instructor.

**Home Economics**

See Family and Consumer Sciences, Fashion, Interior Design, Institutional Food Service, Child Development

**Humanities (HUM)**

Contact the English Department for further information, (760) 744-1150, ext. 2392

**COURSE OFFERINGS****HUM 100 Introduction to Humanities (3)***3 hours lecture***Transfer acceptability:** CSU; UC

This course examines significant movements and developments in literature and other arts in Western culture from classical times to the late Middle Ages. Emphasis is on ideas and their realization in works of art.

**HUM 101 Introduction to Humanities (3)***3 hours lecture***Transfer acceptability:** CSU; UC

This course is a general survey of the fine arts in the Western world. Arranged chronologically rather than thematically, the course material includes consideration of the major achievements of Western culture from the Renaissance until the present.

**HUM 150 Humanities Through the Arts (3)***3 hours lecture***Transfer acceptability:** CSU; UC

This telecourse examines significant artistic movements and developments in Western culture from classical times to the present. Emphasis is on ideas and their realization in the fields of art, including but not limited to: cinema, drama,

music, literature, painting, sculpture, and architecture. Each of these arts is considered in terms of historical development, elements used in creating works of art, nature of form and structure, subject and content, critical evaluation.

**HUM 197 Humanities Topics (.5-4)**

Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture, laboratory, or lecture/laboratory may be scheduled by the department. Refer to Class Schedule.

**Note:** May be taken 4 times**Transfer acceptability:** CSU; UC – Credit determined by UC upon review of course syllabus.

Topics in Humanities. See class schedule for specific topic covered. Course title will designate subject covered.

**Industrial Technology (IT)**

See Cabinet and Furniture Technology, Drafting Technology, and Electronics and Computer Hardware Technology for additional courses

Contact the Trade and Industry Department for further information, (760) 744-1150, ext. 2545

**COURSE OFFERINGS****IT 100 Technical Mathematics (3)***3 hours lecture*

Methods and experience in defining and solving mathematical problems in industrial technology. Special emphasis will be given to the application of these basic processes to the solution of the unique mathematical problems encountered in the areas of architecture, automotive, drafting, machine, welding, and woodworking technology.

**IT 197 Industrial Technology Topics (.5-4)**

Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture, laboratory, or lecture/laboratory may be scheduled by the department. Refer to Class Schedule.

**Note:** May be taken 4 times

Topics in Industrial Technology. See class schedule for specific topic covered. Course title will designate subject covered.

**Institutional Food Service Training (IFS)**

Contact the Design and Consumer Education Department for further information, (760) 744-1150, ext. 2349

Associate in Arts degree requirements, Certificate of Achievement requirements, and Certificate of Proficiency requirements are listed in Section 6 (green pages) of the catalog.

**PROGRAMS OF STUDY****Child Nutrition General Assistant**

Prepares students for employment as general assistants in child nutrition food service facilities.

**CERTIFICATE OF PROFICIENCY**

Program Requirements	Units
IFS 100 Food Safety	3
IFS 101 or Basic Skills/Basic Foods	
IFS 120 Introduction to Child Nutrition	1,3
FCS/HE 165 Fundamentals of Nutrition	3

**TOTAL UNITS****7 - 9**

### Child Nutrition Site Manager

Prepares students for employment as managers in child nutrition food service facilities.

#### A.A. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT

Program Requirements	Units
IFS 100 Food Safety	3
IFS 101 or Basic Skills/Basic Foods	
IFS 120 Introduction to Child Nutrition	1,3
IFS 105 Employee Dev/Supervision for Food Services	3
IFS 110 Food Production Management	3
IFS 146 Financial Management for Food Services	3
FCS/HE 165 Fundamentals of Nutrition	3
<b>TOTAL UNITS</b>	<b>16 - 18</b>

Recommended Elective: FCS 150

### Child Nutrition Substitute

Prepares students for employment as substitutes in child nutrition food service facilities.

#### CERTIFICATE OF PROFICIENCY

Program Requirements	Units
IFS 100 Food Safety	3
IFS 101 or Basic Skills/Basic Foods	
IFS 120 Introduction to Child Nutrition	1,3
<b>TOTAL UNITS</b>	<b>4 - 6</b>

### Child Nutrition Technical Assistant

Prepares students for employment as technical assistants in child nutrition food service facilities.

#### CERTIFICATE OF PROFICIENCY

Program Requirements	Units
IFS 100 Food Safety	3
IFS 101 or Basic Skills/Basic Foods	
IFS 120 Introduction to Child Nutrition	1,3
FCS/HE 165 Fundamentals of Nutrition	3
<b>TOTAL UNITS</b>	<b>7 - 9</b>

### Dietetic Service Supervisor

Prepares students for employment as managers or workers in health care institutions. Students should be aware that not all Institutional Food Service Training courses are offered every semester. See Class Schedule or Department Chairperson for additional information.

These courses are also required for a Certificate of Achievement by the State of California, Department of Health Services, Licensing and Certificate Division.

#### A.A. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT

Program Requirements	Units
IFS 100 or Food Safety	3
IFS 102A and Food Safety Module 1	
IFS 102B and Food Safety Module 2	
IFS 102C Food Safety Module 3	3
IFS 105 Employee Dev/Supervision for Food Services	3
IFS 110 Food Production Management	3

IFS 115 Modified Diets	3
FCS/HE 165 Fundamentals of Nutrition	3
<b>TOTAL UNITS</b>	<b>15</b>

Recommended Elective: FCS 150

#### COURSE OFFERINGS

Courses numbered under 50 are non-degree courses.  
Courses numbered under 100 are not intended for transfer credit.

**IFS 45 Firehouse Cooking Skills/Culinary Arts (3)**  
3 hours lecture  
Basic cooking, nutrition, and meal planning skills will be developed for individuals working in a firehouse setting. Instruction will stress proper sanitation and safety methods for preparing meals for a group.

**IFS 100 Food Safety (3)**  
3 hours lecture  
**Transfer acceptability:** CSU  
Principles for prevention of foodborne illnesses during food production. Safe food handling practices applied to purchasing, receiving, storage, preparation, and service. Food microbiology, personal hygiene, maintaining sanitary equipment and facilities, accident prevention, crisis management and regulatory issues explored. Hazard analysis critical control point (HAACP) and current FDA Food Code discussed.

**IFS 101 Basic Skills/Basic Foods (3)**  
6 hours lecture/laboratory  
Entry-level preparation for employment in food service. Large quantity food preparation and effective use of resources and equipment.

**IFS 102A Food Safety Module 1 (1)**  
1 hour lecture  
**Transfer acceptability:** CSU  
Microworld and foodborne illness.

**IFS 102B Food Safety Module 2 (1)**  
1 hour lecture  
**Transfer acceptability:** CSU  
Food safety in production.

**IFS 102C Food Safety Module 3 (1)**  
1 hour lecture  
**Transfer acceptability:** CSU  
Food safety application. Students completing IFS 102A, 102B, and 102C are eligible to take a nationally approved food safety manager's examination.

**IFS 105 Employee Development and Supervision for Food Services (3)**  
3 hours lecture  
Management theory especially for beginning or first-line supervisors. Communications, motivation, work climate, job descriptions, employee recruitment, performance evaluation, employee discipline, and productivity. Uses common food service problems to develop skills, attitudes, and abilities needed to manage people successfully.

**IFS 110 Food Production Management (3)**  
2 hours lecture 3 hours laboratory  
Quantity food preparation with emphasis on food production management, and the effective use of time and equipment. Food preparation processes and techniques including organization for presentation and service. Experiences to develop menu planning and cooking judgment, recipe conversions and substitutions, and production supervisor responsibilities.

**IFS 115 Modified Diets (3)**  
 2 hours lecture 3 hours laboratory  
**Recommended preparation:** FCS/HE 165  
**Transfer acceptability:** CSU  
 Principles of nutrition as they relate to special and abnormal physical conditions. Effect of proper nutrition upon the body, nutritional assessment/screening techniques, medical terminology, care planning/charting, state and federal regulations. Routine hospital diets will be studied and planned in depth along with dietary modifications necessary for disease conditions or surgical/medical problems. Case studies will be presented. Field experience in a health care setting will be arranged by the instructor.

**IFS 120 Introduction to Child Nutrition (1)**  
 1 hour lecture  
 The scope, organization, and responsibilities of child nutrition food service. Job positions at all levels are discussed including education and experience requirements, personal qualifications, job responsibilities, and future opportunities.

**IFS 146 Financial Management for Food Services (3)**  
 3 hours lecture  
 Managerial concepts of cost control, food control and necessary report forms for analysis of inventory and forecasting procedures.

**IFS 197 Institutional Food Service Training Topics (.5-4)**  
 Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture, laboratory or lecture/laboratory may be scheduled by the department. Refer to Class Schedule.  
**Note:** May be taken 4 times  
 Topics in Institutional Food Service Training. See Class Schedule for specific topic offered. Course title will designate subject covered.

## Insurance (INS)

Contact the Business Education Department for further information, (760) 744-1150, ext. 2488

Associate in Arts degree requirements, Certificate of Achievement requirements, and Certificate of Proficiency requirements are listed in Section 6 (green pages) of the catalog.

### PROGRAM OF STUDY

## Commercial and Personal Insurance Services

This program is designed to prepare students for entry into the insurance industry and to provide further training for individuals who have recently entered the insurance industry.

### A.A. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT

Program Requirements		Units
ACCT 103	Financial Accounting	4
ACCT 104	Accounting Spreadsheet Laboratory	1
BUS 100	Introduction to Business	3
BUS 110	Business Mathematics	3
BUS 115	Business Law	3
BUS 170	Word for Business – Basic	1
BUS 176	Excel Intermediate	1
BUS 180	Access for Business	1
BUS 205	Business Writing	3
INS 100	Introduction to Insurance	1
INS 110	Principles of Property and Liability Insurance	3
INS 115	Personal Insurance	3
INS 120	Commercial Insurance	3

INS 125	Insurance Codes and Ethics	1
CE 100	Cooperative Education	1-4

**TOTAL UNITS 32-35**

The program parallels the one developed by the Business Education Statewide Advisory Committee for California Community Colleges in 2004 and 2005.

\*Commercial and Personal Insurance Services A.A. Degree Major or Certificate of Achievement pending approval by Chancellor's Office at time of catalog publication.

### COURSE OFFERINGS

**INS 100 Introduction to Insurance (1)**  
 1 hour lecture

The course is designed to provide a basic foundation in the modern property/casualty insurance system. Students will learn: how insurance products and services are distributed to the consumer; how the insurance company departments function; how reinsurance is used to create an insurance company and insure large property and high liability values/limits. It also provides students an understanding of civil laws or tort and contracts; a review of the basic commercial and personal Insurance Service Office (ISO) insurance contracts; and details the importance of the risk management process.

**INS 110 Principles of Property and Liability Insurance (3)**  
 3 hours lecture

**Prerequisite:** A minimum grade of 'C' in INS 100

The study of this course is divided into three segments: Fundamentals of Insurance -information on what insurance is, who provides it, how it is regulated, and how the financial performance of insurers is measured. Insurance Operations - describes the functions of marketing, underwriting, and claims. Insurance contracts, loss exposure, and risk management -discusses insurance as a contract, introduces both property and liability loss exposures and policy provisions and provides a basic discussion of risk management as a means of managing loss exposures.

**INS 115 Personal Insurance (3)**  
 3 hours lecture

**Prerequisite:** A minimum grade of 'C' in INS 100

Introduction to basic information regarding personal insurance, including property and liability loss exposures and personal risk management. The course includes information about automobile insurance; homeowners insurance; other residential insurance, such as fire and earthquake insurance; marine insurance; other personal property and liability insurance; financial planning; life insurance; and health insurance.

**INS 120 Commercial Insurance (3)**  
 3 hours lecture

**Prerequisite:** A minimum grade of 'C' in INS 100

The study of basic information regarding the entire area of commercial insurance. The concepts covered include commercial property insurance; business income insurance; commercial crime insurance; equipment breakdown insurance; inland and ocean marine insurance; commercial general liability insurance; commercial automobile insurance; business owners policies and farm insurance; workers compensation and employers liability insurance; and other miscellaneous commercial coverages.

**INS 125 Insurance Code and Ethics (1)**  
 1 hour lecture

**Prerequisite:** A minimum grade of 'C' in INS 100

The study of Article II, 4. of the University Risk Management & Insurance Association, which covers a statement of ethics and standards of professional conduct for member representatives. The principles for the development of a systems approach for making ethical business decisions is reviewed. Such a methodical process provides for selecting alternatives that are responsible, practical, and defensible.

## Interior Design (ID)

Contact the Design and Consumer Education Department for further information, (760) 744-1150, ext. 2349

Associate in Arts degree requirements, Certificate of Achievement requirements, and Certificate of Proficiency requirements are listed in Section 6 (green pages) of the catalog.

Students should be aware that not all Interior Design courses are offered every semester. See Class Schedule or Department Chairperson for additional information.

### PROGRAMS OF STUDY

#### Interior Design – Certificate of Achievement

Coordinated by educators and professional interior designers, this certificate of achievement offers an interdisciplinary approach to fundamental design, space planning, design analysis, and materials selection and specifications relating to residential and commercial spaces.

Prepares students to pursue employment in the interior design field with emphasis on retail furnishings and merchandising.

#### CERTIFICATE OF ACHIEVEMENT

Program Requirements		Units
First Semester		
ID 100	Interior Design	3
ID 105	Materials and Processes in Interior Design	3
BUS 125	Business English	3
Second Semester		
ID 110	Professional Practices in Interior Design	3
ID 135	Fabrics for Designers	3
ID 150	Computer Aided Drafting for Designers (CADD)	3
CE 150	Cooperative Education Internship	2-3
<b>TOTAL UNITS</b>		<b>20 - 21</b>

Recommended Electives: ID 115, 120, 130, 145, 198

#### Interior Design - A.A. Degree Major

Coordinated by educators and professional interior designers, this A.A. degree major offers an interdisciplinary approach to fundamental design, space planning, design analysis, and materials selection and specifications relating to residential and commercial spaces.

Prepares students to pursue employment in the interior design field.  
A.A. Degree Major

Program Requirements		Units
First Semester		
ID 100	Interior Design	3
ID 105	Materials and Processes in Interior Design	3
ID 115	History of Decorative Arts I	3
DT 105	Basic Architectural Drafting	3
Second Semester		
ID 110	Professional Practices in Interior Design	3
ID 120	History of Decorative Arts II	3
ID 125	Presentation Methods in Interior Design I	3
ID 135	Fabrics for Designers	3
ID 150	Computer Aided Drafting for Designers (CADD)	3
Third/Fourth Semesters		
ID 130	Light and Color	3

ID 140	Residential Interior Design	3
ID 141	Commercial Interior Design	3
ID 160	Interior Illustration	3
ID 170	Space Planning	3
CE 150	Cooperative Education Internship	2-3

**TOTAL UNITS 44 - 45**

Recommended Electives: ART 100, 102; BUS 140; CI 100; ID 145, 151

### COURSE OFFERINGS

**ID 100 Interior Design (3)**

3 hours lecture

**Transfer acceptability:** CSU

The study of functional and aesthetic interior design principles used to create residential interiors. Beginning drafting, space planning, the use of color and the application of these skills in design are stressed. A survey of major twentieth-century architects and designers and their influence on design and lifestyle is analyzed. Instruction is given in furniture arrangement and selection, materials selection, lighting, and the effects of environmental design on human behavior.

**ID 105 Materials and Processes in Interior Design (3)**

3 hours lecture

**Transfer acceptability:** CSU

Selection, care, and use of materials used in residential and commercial interior design.

**ID 110 Professional Practices in Interior Design (3)**

3 hours lecture

**Transfer acceptability:** CSU

Specific business and professional practices as they apply to residential and commercial interior design. Career opportunities, personal qualifications, and skills required for employment are also presented.

**ID 115 History of Decorative Arts I (3)**

3 hours lecture

**Transfer acceptability:** CSU

The history of European furniture architecture and decorative arts from antiquity to the 19th Century. Emphasis on the contributions of religious, political, and social influences in the decorative arts.

**ID 120 History of Decorative Arts II (3)**

3 hours lecture

**Transfer acceptability:** CSU

The historical relationship between decorative arts, furniture styles, and interior architecture is illustrated in this overview of design heritage. This course begins with 16th century England and America and analyzes the influences and changes in design to the present. Emphasis is placed on style development as it relates to political, economic, and social forces.

**ID 125 Presentation Methods in Interior Design I (3)**

6 hours lecture/laboratory

**Transfer acceptability:** CSU

Form space comprehension in relationship to furniture placement through residential and commercial design drawing exercises, including one and two point perspective problems.

**ID 130 Light and Color (3)**

3 hours lecture

**Transfer acceptability:** CSU

Principles and application of light and its effect on color and the design process in interiors, architecture, and visual merchandising. Emphasizes lighting needs, light sources, light calculations, and energy conservation.

**ID 135 Fabrics for Designers (3)**

3 hours lecture

**Transfer acceptability:** CSU

Selection, use and care of fabrics used in residential and commercial interiors. Emphasis on designer selection and specification of fabrics for upholstering furniture, window treatments, floor coverings, and accessories. Includes survey and selection of historic fabrics in interiors.

**ID 140 Residential Interior Design (3)**

3 hours lecture

**Prerequisite:** ID 100

**Recommended preparation:** ID 125

**Transfer acceptability:** CSU

Development of residential interiors from design concept to installation. Includes materials specifications and design sources. Emphasizes budget analysis, architectural drawings, furniture, and lighting plans.

**ID 141 Commercial Interior Design (3)**

3 hours lecture

**Prerequisite:** ID 100 and a minimum grade of 'C' in DT 105

**Transfer acceptability:** CSU

Development of non residential spaces from design concept to installation. Includes health care facilities and open office interiors. Emphasizes client analysis, space planning, materials specifications, architectural drawings, lighting plans, and budget analysis.

**ID 145 Kitchen Design (3)**

3 hours lecture

**Transfer acceptability:** CSU

Focuses on the principles and procedures involved in designing the kitchen for the most efficient residential and commercial use. Concentrates on the major aspects of planning the kitchen with special consideration of selection and location of equipment; arrangement of work and storage spaces; standards for appliances; health, safety and human anatomy; San Diego Building Codes and Minimum Property Standards; detailed floor plan, working drawings, and cost estimates for labor and material.

**ID 150 Computer Aided Drafting for Designers (CADD) (3)**

6 hours lecture/laboratory

**Transfer acceptability:** CSU

Introduction to computer aided drafting for interior designers, to include three-dimensional rendering, barrier free design, and floor plan layouts.

**ID 151 Advanced Computer Aided Drafting for Designers (3)**

6 hours lecture/laboratory

**Transfer acceptability:** CSU

Advanced applications and topics include prototype drawings, blocks and creating specific libraries, isometric illustration, presentation slide shows, basic and advanced 3 D, and external references. Meets the current needs of the professional working designer.

**ID 160 Interior Illustration (3)**

3 hours lecture

**Recommended preparation:** ID 100

**Transfer acceptability:** CSU

Application of the methods, techniques, and tools used for illustrating interior spaces and products.

**ID 165 Interior Design Laboratory (1)**

3 hours laboratory

**Note:** Credit/No Credit grading only; May be taken 4 times

**Transfer acceptability:** CSU

Enhancement of skills by supervised practice and active participatory experience in individual study. Content to be determined by the need of the student in agreement with and under observation and direction of the instructor.

**ID 170 Space Planning (3)**

3 hours lecture

**Prerequisite:** ID 100

**Transfer acceptability:** CSU

The application of programming, theory, and techniques in residential and commercial space planning. Skills in drafting and presentation techniques are emphasized.

**ID 195 Field Studies in Design (2)**

4 hours lecture/laboratory

**Note:** May be taken 2 times

**Transfer acceptability:** CSU

Tours various locations of the design industry to examine processes of design in furnishings, wall coverings, and textiles. Visits to wholesale showrooms, museums, and places of historic or architectural interest that influence the interior design market.

**ID 197 Interior Design Topics (.5-4)**

Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture, laboratory, or lecture/laboratory may be scheduled by the department. Refer to Class Schedule

**Note:** May be taken 4 times

**Transfer acceptability:** CSU

Topics in Interior Design. See Class Schedule for specific topic offered. Course title will designate subject covered.

**ID 198 Skills in Quick Sketch (.5)**

1 hour lecture/laboratory

Instruction in a practical rough drawing skill, and rapid visualization techniques used to represent concept interiors. Emphasis is on simplified mechanical and freehand systems of drawing. On-site applications and quick visual reproductions for interior or architectural modeling will be emphasized.

**ID 295 Directed Study in Interior Design (1,2,3)**

3, 6, or 9 hours laboratory

**Prerequisite:** Approval of project or research by department chairperson/director

**Note:** May be taken 4 times

**Transfer acceptability:** CSU

Independent study for students who have demonstrated skills and/or proficiencies in Interior Design subjects and have the initiative to work independently on projects or research outside the context of regularly scheduled classes. Students will work under the personal supervision of an instructor.

**International Business (IBUS)**

Contact the Business Education Department for further information, (760) 744-1150, ext. 2488

Associate in Arts degree requirements, Certificate of Achievement requirements, and Certificate of Proficiency requirements are listed in Section 6 (green pages) of the catalog.

**PROGRAM OF STUDY**

**International Business**

This program is designed to prepare individuals for a career in international business and/or management.

**A.A. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT**

Program Requirements		Units
ACCT 103	Financial Accounting	4
ACCT 104	Accounting Spreadsheet Laboratory	1
BUS 100	Introduction to Business	3
BUS 110	Business Mathematics	3
BUS 155	Marketing	3
BUS 205	Business Writing	3
IBUS 100	Intro to Int'l Business Mgmt	3

IBUS 105	International Marketing	3
IBUS 110	Cultural Environment/Int'l Business	3
IBUS 115	International Banking and Finance	3
IBUS 120	Essential/Import/Export Procedures	3
CE 100	Cooperative Education	2,3,4

**TOTAL UNITS** **34 - 36**

Recommended Electives: ANTH 105, 145; ECON 110; GEOG 105; HIST 110; PHIL 110; POSC 110

### COURSE OFFERINGS

**IBUS 100 Introduction to International Business and Management (3)**

3 hours lecture

**Recommended preparation:** BUS 100

**Transfer acceptability:** CSU

Surveys the international dimension of business including trade, financial, economic, cultural framework, foreign investment patterns, and international managerial problems and policies at the corporate level. Also covers the role of the international manager with regard to entering foreign markets and supervising operations in existing markets, and the pros and cons of protectionism.

**IBUS 105 International Marketing (3)**

3 hours lecture

**Recommended preparation:** IBUS 100

**Transfer acceptability:** CSU

Surveys international organizations' basic elements for developing markets. Analyzes the market design and the techniques necessary to develop business within selected regions of the world. Discusses the impact due to differences in customs, languages, attitudes, and culture.

**IBUS 110 The Cultural Environment of International Business (3)**

3 hours lecture

**Recommended preparation:** IBUS 100

**Transfer acceptability:** CSU

Focuses on the cultural environment of international business affecting the conduct of four regions in the Pacific Rim: Canada, Asia, Latin America, and Russia. Students examine the nature and evolution of culture, language, education, religion, and values as they apply to business situations. Examines the differences surrounding political and managerial practices in selected societies.

**IBUS 115 International Banking and Finance (3)**

3 hours lecture

**Recommended preparation:** IBUS 100

**Transfer acceptability:** CSU

Surveys international organizations' basic elements for developing markets. Analyzes the market design and the techniques necessary to develop business within selected regions of the world. Discusses the impact due to differences in customs, languages, attitudes, and culture.

**IBUS 120 Essentials of Import/Export Procedures (3)**

3 hours lecture

**Recommended preparation:** IBUS 100

**Transfer acceptability:** CSU

Application of practical aspects of export and import procedures by international business: organization, development of foreign sales, export and import procedures, and regulations and documentation of financial operations of global trade.

**IBUS 197 International Business Topics (.5-4)**

Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture, laboratory, or lecture/laboratory may be scheduled by the department. Refer to Class Schedule.

**Note:** May be taken 4 times

**Transfer acceptability:** CSU

Topics in International Business. See Class Schedule for specific topic offered. Course title will designate subject covered.

## Internet

See Business Education and Graphic Communications

## Italian (ITAL)

Contact the Foreign Languages Department for further information, (760) 744-1150, ext. 2390

### COURSE OFFERINGS

For students who have completed foreign language course work at the high school level, and need clarification regarding placement in college level course work, contact the Counseling Center. Universities have varying policies regarding the granting of transfer credit when there is a combination of high school and college level course work.

**ITAL 101 Italian I (5)**

5 hours lecture-1 hour laboratory

**Transfer acceptability:** CSU; UC

This course is the first semester of Italian. This elementary level course is a study of the Italian language and Italian-speaking cultures, with emphasis on the development of communicative skills and basic structures. Course combines in-class instruction and practice with self-paced study in the Foreign Language Laboratory. This beginning-level course is for students with no previous coursework in Italian.

**ITAL 102 Italian II (5)**

(Formerly ITAL 110)

5 hours lecture-1 hour laboratory

**Prerequisite:** ITAL 101 or two years of high school Italian

**Transfer acceptability:** CSU; UC

This course is the first semester of Italian. This elementary level course is a study of the Italian language and Italian-speaking cultures, with emphasis on the development of communicative skills and basic structures. Course combines in-class instruction and practice with self-paced study in the Foreign Language Laboratory. This beginning-level course is for students with no previous coursework in Italian.

**ITAL 197 Italian Topics (.5-5)**

Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture, laboratory, or lecture/laboratory may be scheduled by the department. Refer to Class Schedule.

**Note:** May be taken 4 times

**Transfer acceptability:** CSU; UC – Credit determined by UC upon review of course syllabus.

Topics in Italian. See Class Schedule for specific topic offered. Course title will designate subject covered.

**ITAL 201 Italian III (5)**

5 hours lecture

**Prerequisite:** ITAL 102 or three years of high school Italian

**Transfer acceptability:** CSU; UC

This course is the second semester of Italian. This elementary level course is a study of the Italian language and Italian-speaking cultures, with emphasis on the development of communicative skills and basic structures. Course combines in-class instruction and practice with self-paced study in the Foreign Language Laboratory.

**ITAL 201A Italian IIIA (3)**

(Formerly ITAL 205)

3 hours lecture

**Prerequisite:** ITAL 102 or three years of high school Italian

**Note:** Covers the first half of ITAL 201; not open to students with credit for ITAL 201

**Transfer acceptability:** CSU; UC

Italian 201A is equivalent to the first half of Italian 201. This intermediate level

course is a study of the Italian language and Italian-speaking cultures, focusing on intermediate level structures and readings of culturally relevant authentic materials. Emphasis is on developing oral, listening, reading and writing skills in order to acquire proficiency in Italian. Class is largely conducted in Italian.

**ITAL 201B Italian IIIB** (3)  
(Formerly ITAL 206)

3 hours lecture

**Prerequisite:** ITAL 201A

**Note:** Covers the second half of ITAL 201; not open to students with credit for ITAL 201

**Transfer acceptability:** CSU; UC

Italian 201B is equivalent to the second half of Italian 201, and is a continuation of Italian 201A. This intermediate level course is a study of the Italian language and Italian-speaking cultures, focusing on intermediate level structures and readings of culturally relevant authentic materials. Emphasis is on developing oral, listening, reading and writing skills in order to acquire proficiency in Italian. Class is largely conducted in Italian.

## Japanese (JAPN)

Contact the Foreign Languages Department for further information, (760) 744-1150, ext. 2390

### COURSE OFFERINGS

For students who have completed foreign language course work at the high school level, and need clarification regarding placement in college level course work, contact the Counseling Center. Universities have varying policies regarding the granting of transfer credit when there is a combination of high school and college level course work.

**JAPN 101 Japanese I** (5)

5 hours lecture 1 hour laboratory

**Transfer acceptability:** CSU; UC - JAPN 101+102=CAN JAPN SEQ A

This course is the first semester of Japanese. This elementary level course is a study of the Japanese language and Japanese-speaking cultures, with emphasis on the development of communicative skills and basic structures. The course includes a study of fundamental grammar, idiomatic expressions, Hiragana and Katakana (Japanese alphabets). Course combines in-class instruction and practice with self-paces study in the Foreign Language Laboratory. This beginning-level course is for students with no previous coursework in Japanese.

**JAPN 101A Japanese IA** (3)

(Formerly JAPN 105)

3 hours lecture

**Note:** Covers the first half of JAPN 101; not open to students with credit for JAPN 101

**Transfer acceptability:** CSU; UC

Japanese 101A is equivalent to the first half of Japanese 101. This elementary level course is a study of the Japanese language and Japanese-speaking cultures, with emphasis on the development of communicative skills and basic structures. This beginning-level course is for students with no previous coursework in Japanese.

**JAPN 101B Japanese IB** (3)

(Formerly JAPN 106)

3 hours lecture

**Prerequisite:** JAPN 101A

**Note:** Covers the second half of JAPN 101; not open to students with credit for JAPN 101

**Transfer acceptability:** CSU; UC

Japanese 101B is equivalent to the second half of Japanese 101, and is a continuation of Japanese 101A. This elementary level course is a study of the Japanese language and Japanese-speaking cultures, with emphasis on the development of communicative skills and basic structures.

**JAPN 102 Japanese II** (5)

(Formerly JAPN 110)

5 hours lecture 1 hour laboratory

**Prerequisite:** JAPN 101, or JAPN 101A and 101B or two years of high school Japanese

**Transfer acceptability:** CSU; UC - JAPN 101+ 102=CAN JAPN SEQ A

This course is the second semester of Japanese. This elementary level course is a study of the Japanese language and Japanese-speaking cultures, with emphasis on the development of communicative skills and basic structures. The course includes a study of fundamental grammar, idiomatic expressions, Kanji (Chinese characters) in addition to Hiragana and Katakana (Japanese alphabets). Course combines in-class instruction and practice with self-paces study in the Foreign Language Laboratory.

**JAPN 197 Japanese Topics** (.5-5)

Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture, laboratory, or lecture/laboratory may be scheduled by the department. Refer to Class Schedule.

**Note:** May be taken 4 times

**Transfer acceptability:** CSU; UC – Credit determined by UC upon review of course syllabus.

Topics in Japanese. See Class Schedule for specific topic offered. Course title will designate subject covered.

**JAPN 201 Japanese III** (5)

5 hours lecture

**Prerequisite:** JAPN 102 or three years of high school Japanese

**Transfer acceptability:** CSU; UC

This course is the third semester of Japanese. This intermediate level course is a study of the Japanese language and Japanese-speaking cultures, focusing on intermediate level structures and readings of culturally relevant authentic materials. Emphasis is on developing oral, listening, reading and writing skills in order to acquire proficiency in Japanese.

**JAPN 202 Japanese IV** (5)

(Formerly JAPN 210)

5 hours lecture

**Prerequisite:** JAPN 201 or four years of high school Japanese

**Transfer acceptability:** CSU; UC

This course is the fourth semester of Japanese. This intermediate level course is a study of the Japanese language and of special topics on the culture of the Japanese-speaking world. Emphasis is on further development of cross-cultural awareness, as well as, the development of oral, listening, reading and writing skills in order to improve communicative competence in Japanese.

## Journalism (JOUR)

Contact the Communications Department for further information, (760) 744-1150, ext. 2440. For transfer information, consult a Palomar College counselor.

Associate in Arts degree requirements, Certificate of Achievement requirements, and Certificate of Proficiency requirements are listed in Section 6 (green pages) of the catalog.

### PROGRAMS OF STUDY

#### Journalism

Provides a background in communication theory and history; practical experience in gathering, writing, editing, and displaying news; and actual newspaper production experience.

#### A.A. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT

Program Requirements	Units
JOUR 101 News Writing and Reporting	3
JOUR 105 Newspaper Production	3

JOUR 205	Advanced Newspaper Production	3
JOUR 210	Advanced Newswriting and Reporting	3
JOUR 215	Newspaper Editing	3
JOUR 110L	Journalism Laboratory	1,2
COMM 100 or	Mass Media in America	
COMM 105	Human Values in the Mass Media	3
ENG 100	English Composition	4
GC/R GC 149	Page Layout and Design I	3
POSC 101	Intro Politics/American Political Institutions	3
POSC 102	Intro to U.S. and California Governments	3
PSYC 100 or	Intro to Psychology	
SOC 100	Intro to Sociology	3

**TOTAL UNITS** **35-36**

Recommended Electives: JOUR/PHOT 140, JOUR 103, JOUR 295  
Note: JOUR 105, 205, 210, and 215 may not be taken concurrently.

### COURSE OFFERINGS

**JOUR 101 News Writing and Reporting** (3)  
3 hours lecture

**Transfer acceptability:** CSU; CAN JOUR 2

Principles of basic journalism. Development of news judgment and clear writing skills. Evaluation of news reporting techniques and sources, and ethical and legal considerations. Emphasis on practical application for newspaper journalism.

**JOUR 103 Feature Writing** (3)  
3 hours lecture

**Transfer acceptability:** CSU; CAN JOUR 2

Principles of newspaper and magazine feature writing. Development of clear writing skills. Evaluation of interviewing techniques and information gathering. Applications of ethical and legal standards. Emphasis on practical application for newspaper and magazine journalism.

**JOUR 105 Newspaper Production** (3)  
3 hours lecture

**Prerequisite:** JOUR 101

**Corequisite:** JOUR 110L

**Transfer acceptability:** CSU

Journalism for the student who wants practical application in newspaper work. Emphasis is on writing and editing for Palomar College's newspaper, The Telescope.

**JOUR 110L Journalism Laboratory** (1,2)  
3 or 6 hours laboratory

**Note:** May be taken 4 times

**Transfer acceptability:** CSU

Practice in copywriting, layout, headline writing, and other skills necessary to produce the campus newspaper, The Telescope, or in related journalism projects.

**JOUR 140 Photojournalism** (3.5)  
7 hours lecture/laboratory

**Prerequisite:** PHOT 100 or 110

**Note:** Cross listed as PHOT 140

**Transfer acceptability:** CSU

A study of the history and practice of photojournalism, providing specific application through photographing for The Telescope, Palomar College's newspaper. Student must provide own camera.

**JOUR 205 Advanced Newspaper Production** (3)  
3 hours lecture

**Prerequisite:** JOUR 105

**Corequisite:** JOUR 110L

**Transfer acceptability:** CSU

Advanced work in the production of The Telescope. Emphasis is on writing, photography, page layout and graphic design.

**JOUR 210 Advanced Newswriting and Reporting** (3)  
3 hours lecture

**Prerequisite:** JOUR 205

**Corequisite:** JOUR 110L

**Transfer acceptability:** CSU

Practical newswriting experience through work on The Telescope staff. All journalistic skills are refined and augmented in this course. Accurate reporting and development of compelling, clear, and concise writing technique are stressed.

**JOUR 215 Newspaper Editing** (3)  
3 hours lecture

**Prerequisite:** JOUR 210

**Corequisite:** JOUR 110L

**Transfer acceptability:** CSU

Basic skills involved in editing a newspaper, including news judgment, directing reporting staff, copy editing, headline writing, page layout, selection and placement of photos, and computerized page design. All skills are practiced in actual editorial situations for the Palomar College newspaper, The Telescope.

**JOUR 295 Directed Study in Journalism** (1,2,3)  
3, 6, or 9 hours laboratory

**Prerequisite:** Approval of project or research by department chairperson/director

**Note:** May be taken 4 times

**Transfer acceptability:** CSU

Independent study for students who have demonstrated skills and/or proficiencies in Journalism subjects and have the initiative to work independently on projects or research outside the context of regularly scheduled classes. Students will work under the personal supervision of an instructor.

## Judaic Studies (JS)

See Multicultural Studies for additional courses

Contact the Multicultural Studies Department for further information, (760) 744-1150, ext. 2206

### COURSE OFFERINGS

**JS 100 Introduction to Judaism** (3)  
3 hours lecture

**Transfer acceptability:** CSU; UC

The philosophy, religion and ethnic culture of the Jewish people from the Patriarchs and Prophets through the modern branches of Judaism. Topics covered include Torah, Talmud, various commentaries and movements affecting Judaism; ceremonies, artifacts, and language.

**JS 105 Introduction to Judaism II – Culture** (3)  
3 hours lecture

**Transfer acceptability:** CSU; UC

A survey of the cultural and historical roots of the Jewish people from 2000 B.C. to the present; their role in the ancient Near East; relationships in the Western World from the Greco Roman period to the post World War II era; creation and development of the state of Israel; cultural, religious, and political impact on America and the world community.

## Legal Studies (LS)

See Paralegal Studies for additional courses

Contact the Business Education Department for further information, (760) 744-1150, ext. 2488

Associate in Arts degree requirements, Certificate of Achievement requirements, and Certificate of Proficiency requirements are listed in Section 6 (green pages) of the catalog.

**PROGRAM OF STUDY**

**Legal Studies**

The Legal Studies major leads to an A.A. degree or transfer program, providing students with general knowledge of the philosophy of law, the legal process, legal institutions, and legal reasoning. This is not a paralegal or a para-professional major but will prepare students for careers within the legal profession.

**A.A. DEGREE MAJOR**

<b>Program Requirements</b>		<b>Units</b>
LS/PLS 121	Introduction to Law	3
LS 145	Legal Ethics	3
LS/PLS 150	Legal Research	2
LS/PLS 155	Legal Writing	1
LS/PLS 240	Civil Liberties and Procedures	3
LS/PLS 245	Civil Litigation I	3
LS/PLS 290	Contemporary Legal Issues	2
PHIL 115	Logic and Critical Thinking	3
POSC 101	Intro Politics/American Political Institutions	3
POSC 102	Intro U.S./Calif Governments	3
POSC 110	Introduction to World Politics	3
<b>Electives (Select 6 units)</b>		
AJ 100	Introduction to Criminal Justice	3
BUS 115	Business Law	3
PLS 140	Contract Law	3
LS/PLS 190	Clinical Studies	3
PLS 261	Torts and Personal Injury	3
PLS 263	Administrative Law and Procedure	2
PLS 265	Criminal Law and Procedure	2
LS 295	Directed Study in Legal Studies	1,2,3
<b>TOTAL UNITS</b>		<b>35</b>

Additionally, there is a requirement to demonstrate computer literacy. This requirement can be satisfied by completion of PLS 110 or BUS 170 and 171 or by examination.

Note: A.A. degree students must complete the following general education areas: English Composition, Natural Sciences, Humanities and Integrated Self and Life-long Learning.

Legal Studies students should seek early advising for transfer.

**COURSE OFFERINGS**

<b>LS 121</b>	<b>Introduction to Law</b>	<b>(3)</b>
<i>3 hours lecture</i>		
<b>Note:</b> Cross listed as PLS 121		
<b>Transfer acceptability:</b> CSU		
An introduction to law and the legal system. Includes an examination of the federal and state court system, criminal law, civil law, administrative law, and procedural law.		
<b>LS 145</b>	<b>Legal Ethics</b>	<b>(3)</b>
<i>3 hours lecture</i>		
<b>Transfer acceptability:</b> CSU		
Legal ethics and professional responsibility within the legal profession. Focuses on standards required by the American Bar Association and other professional associations involving legal professionals working in the field of law.		
<b>LS 150</b>	<b>Legal Research</b>	<b>(2)</b>
<i>2 hours lecture</i>		
<b>Recommended preparation:</b> A minimum grade of 'C' in ENG 100		
<b>Note:</b> Cross listed as PLS 150		
<b>Transfer acceptability:</b> CSU		
The fundamental aspects of legal research through an in-depth analysis of case		

law, statutory law and administrative law on both a Federal and State level. It will further instruct the student on the appropriate use of secondary sources used in legal research.

**LS 155 Legal Writing (1)**

*1 hour lecture*

**Prerequisite:** LS/PLS 150 and ENG 100

**Note:** Cross listed as PLS 155

**Transfer acceptability:** CSU

The techniques of legal writing and analysis as applied to the drafting of a legal memorandum, case briefing, and law office correspondence. Using legal research skills developed in PLS 150/LS 150 to formulate written answers, in proper legal format, to legal issues and questions presented.

**LS 190 Clinical Studies (3)**

*9 hours laboratory*

**Prerequisite:** LS/ PLS 121

**Note:** Cross listed as PLS 190; may be taken 3 times

**Transfer acceptability:** CSU

This course provides the student with an opportunity to gain practical work experience within the legal field. The student will complete 120 hours of work at the internship site and attend three seminars during the semester that will focus on transitioning to the work force.

**LS 240 Civil Liberties and Procedures (3)**

*3 hours lecture*

**Note:** Cross listed as PLS 240

**Transfer acceptability:** CSU

**Recommended preparation:** ENG 50 or eligibility for ENG 100

The study of the Bill of Rights and Supreme Court decisions focusing on civil rights and liberties. This area of constitutional law exams the relationship between individuals and government. Emphasis is on minority issues such as privacy, personal freedom, political equality, and first amendment jurisprudence.

**LS 245 Civil Litigation I (3)**

*3 hours lecture*

**Prerequisite:** LS/PLS 121

**Note:** Cross listed as PLS 245

**Transfer acceptability:** CSU

The basic principles of civil procedures as they apply to jurisdiction, venue and pleadings required from both complainant and defense as viewed within the California Court System.

**LS 290 Contemporary Legal Issues (2)**

*2 hours lecture*

**Prerequisite:** LS/ PLS 150

**Note:** Cross listed as PLS 290

**Transfer acceptability:** CSU

Contemporary legal issues will be explored by leading experts in the field via TV broadcasts. Seminars will be conducted for the purpose of further developing legal issues and completing a research project. Students will be encouraged to submit research projects to AAFPE for publication in the American Association for Paralegal Education Law Journal. This capstone course focuses on advanced legal writing, analysis, and research.

**LS 295 Directed Study in Legal Studies (1,2,3)**

*3, 6, or 9 hours of laboratory*

**Prerequisite:** Approval of project or research by department chairperson/director

**Transfer acceptability:** CSU

Independent study for students who have demonstrated skills and/or proficiencies in legal Studies subjects and have the initiative to work independently on projects or research outside the context of regularly scheduled classes. Students will work under the personal supervision of an instructor.

## Liberal Studies

Contact the Counseling Center for further information, (760) 744-1150, ext. 2179

Associate in Arts degree requirements, Certificate of Achievement requirements, and Certificate of Proficiency requirements are listed in Section 6 (green pages) of the catalog.

### PROGRAMS OF STUDY

#### Liberal Arts and Sciences

The Liberal Studies discipline, leading to a Liberal Arts and Sciences degree, is designed to allow students to accumulate units to transfer to a four-year college or university. Such students should be knowledgeable of the specific general education requirements for the University of California system, the California State University system, or private universities and colleges, as well as preparation for their particular discipline.

#### A.A. DEGREE MAJOR

##### Select One Option

Although this degree recognizes the completion of lower division general education requirements, it does not guarantee admission to a four-year institution (with the exception of TAG – Option Three).

##### Option One

Complete the CSU General Education transfer certification pattern as listed in the green pages in Section 6 of this catalog.

##### Option Two

Complete the IGETC transfer certification pattern for either the CSU or UC system as listed in the green pages in Section 6 of this catalog.

##### Option Three

Complete the UCSD Transfer Admission Guarantee (TAG) requirements as specified on the TAG contract. See a counselor for TAG requirements.

## Library Technology (LT)

Contact the Library Technology Department for further information, (760) 744-1150, ext. 2666

Associate in Arts degree requirements, Certificate of Achievement requirements, and Certificate of Proficiency requirements are listed in Section 6 (green pages) of the catalog.

### PROGRAM OF STUDY

#### Library Technology

Provides training for students desiring employment as library technical assistants and retraining for those reentering the labor market.

#### A.A. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT

Program Requirements	Units
LT 100 Introduction to Libraries/Info Services	3
LT 110 Library Skills/Technical Services	3
LT 115 Library Operational Skills/Public Services	3
LT 120 Info Sources/Services/Reference	3
LT 130 Library Media and Technology	3
LT 140 Library Services Child/Young Adults	3
CSIS 105 or Computer Concepts and Microcomputer Apps.	
CSIS/R CSIS 120 Microcomputer Applications	3

Group I (Select 3 – 4 units)		
BUS 125	Business English	3
BUS 205	Business Writing	3
ENG 100	English Composition	4

Group II (Select 3 units)		
CE 100	Cooperative Education	1,2,3
CE 150	Cooperative Education Internship	2,3
LT 197	Topics in Library Technology	5-3

**TOTAL UNITS 27 – 28**

### COURSE OFFERINGS

**LT 100 Introduction to Libraries and Information Services (3)**

3 hours lecture

**Transfer acceptability:** CSU

This course is an introduction to the philosophy of library service; history and types of libraries; organization and operation of libraries and history of information. The role of the library/media technician; duties of the library/media technician in public services, reference, and technical services will also be introduced. Topics covered include the basic skills necessary for successful library employment including job search, application procedures, and the relationship of the LMTA to the Librarian, the library staff, and the community served.

**LT 110 Library Operational Skills/Technical Services (3)**

3 hours lecture

**Transfer acceptability:** CSU

This course is an introduction to the principles and practices of technical services including cataloging and acquisitions.

**LT 115 Library Operational Skills/Public Services (3)**

3 hours lecture

**Transfer acceptability:** CSU

This course will prepare the student to provide public service in the circulation area of the library. Students will be introduced to principles and practices of material shelving, interlibrary loan services, circulation of materials, fines, patron records, supervision, handling cash, maintaining statistics, and building security and emergency procedures.

**LT 120 Information Sources and Services/Reference (3)**

3 hours lecture

**Transfer acceptability:** CSU

This course prepares the student to provide assistance in reference services. Students will be introduced to principles and practices of reference interview, reference materials, database searching, online catalogs, World Wide Web searching and evaluation, and bibliographic instruction.

**LT 130 Library Media and Technology (3)**

3 hours lecture

**Transfer acceptability:** CSU

Prepares the student to use instructional media in the classroom and library/media center, with emphasis on the role and utilization of computers and other technology in education. Topics covered include the utilization of videotapes, graphics, and other projected and non-projected media, operation of appropriate equipment, and the production of transparencies, graphics and displays.

**LT 140 Library Services for Children and Young Adults (3)**

3 hours lecture

**Transfer acceptability:** CSU

Practical use of children's and young adults' materials for readers' advisory, research, and reference service in school library/media centers and public library youth services' departments. Current trends, concerns, and methodology for youth programming and literature activities will be covered.

**LT 154 Information for Life Long Learning (3)**

3 hours lecture

**Transfer acceptability:** CSU

This class will prepare students to locate, evaluate, and use information resources through the study of learning styles, goal setting, study skills, health and wellness, and human behavior. Students will work independently and in groups leading to an integrated understanding of themselves and the value of information.

**LT 197 Topics in Library Technology (.5-3)**

Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture, laboratory, or lecture/laboratory may be scheduled by the department. Refer to Class Schedule.

**Note:** May be taken 4 times**Transfer acceptability:** CSU

Selected topics in Library Technology. Refer to the Class Schedule for topics covered.

**Mathematics (MATH)**

Contact the Mathematics Department for further information, (760) 744-1150, ext. 2535

Associate in Arts degree requirements, Certificate of Achievement requirements, and Certificate of Proficiency requirements are listed in Section 6 (green pages) of the catalog.

Any student wishing to earn an A.A. Degree must meet competence requirements at the MATH 60 level. Methods by which a student can demonstrate competence are listed under "Competence Requirements" in front of this catalog. Students wishing to enroll in MATH 50, 50A, 56, 60, 110, 115, 120, 125, and 135 must participate in the mathematics placement process or meet the prerequisite listed in the catalog. The mathematics placement test may be taken two times within a two year period, through the Palomar College Counseling Center. The assessment and placement process determines eligibility for enrollment in these courses. Students interested in determining their readiness to enroll in MATH 140 may additionally request to take the College Algebra Asset Test. Arrangements for this test can be made in the Counseling Center.

**PROGRAM OF STUDY****Mathematics**

Provides the background to satisfy upper division course work in mathematics and for entry level positions that require a knowledge of mathematics such as Technical Assistant and Mathematical Technician. The student is advised to check with the school to which he or she wishes to transfer for additional courses which may be required.

A grade of 'C' or higher must be earned in all required courses. (The department chair/director may waive (1) "D" grade with justification. The Division Dean must also approve and sign these requests).

**A.A. DEGREE MAJOR**

Program Requirements	Units	
MATH 140	Calculus with Analytic Geometry, First Course	5
MATH 141	Calculus with Analytic Geometry, Second Course	4
MATH 205	Calculus with Analytic Geometry, Third Course	4
MATH 120 or	Elementary Statistics	
MATH 200 or	Introduction to Linear Algebra	
MATH 206	Calculus with Differential Equations	3,4
MATH/		
CSIS 146 or	FORTRAN 90 for Mathematics and Science	
CSIS 220 or	Programming for Computer Sciences	
CSIS 235	C for Programmers	3

**TOTAL UNITS 19-20**

Recommended Electives: PHYS 230, 231, 232; CHEM 110, 115; MATH 245

**COURSE OFFERINGS**

Courses numbered under 50 are non-degree courses.

Courses numbered under 100 are not intended for transfer credit.

**MATH 10 Basic Arithmetic (3)**

3 hours lecture

Basic arithmetic computational skills, with an emphasis on the whole numbers, fractions, decimals, and an introduction to the concepts of area and perimeter. Designed for students who are lacking fundamental arithmetic skills.

**MATH 12 Supplemental Instruction for Basic Arithmetic (1)**

1 hour lecture

**Note:** Credit/No Credit grading only; may be taken 2 times

Supplemental instruction for students enrolled in MATH 10 – Basic Arithmetic. Designed for students who need additional review of basic arithmetic topics.

**MATH 15 Prealgebra (3)**

3 hours lecture

**Note:** May be taught in Spanish.

The basic arithmetic operations, integers, fractions, decimals, percents, ratio and proportion, basic geometric concepts, problem-solving techniques, and an introduction to algebraic thinking.

**MATH 17 Supplemental Instruction for Prealgebra (1)**

1 hour lecture

**Note:** Credit/No Credit grading only; may be taken 2 times

Supplemental instruction for students enrolled in MATH 15 - Prealgebra. Designed for students who need additional review of prealgebra topics.

**MATH 42 Supplemental Instruction for Beginning Algebra (1)**

1 hour lecture

**Note:** Credit/No Credit grading only; may be taken 2 times

Supplemental instruction for students enrolled in MATH 50 - Beginning Algebra. Designed for students who need additional review of beginning algebra topics.

**MATH 47 Mathematics Topics (.5-4)**

Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture, laboratory, or lecture/laboratory may be scheduled by the department. Refer to Class Schedule.

**Note:** May be taken 4 times

Topics in Mathematics. See class schedule for specific topic covered. Course title will designate subject covered.

**MATH 50 Beginning Algebra (4)**

4 hours lecture

**Prerequisite:** A minimum grade of 'C' in MATH 15 or eligibility determined through the math placement process**Note:** May be taught in Spanish.

Elementary algebra which emphasizes mathematical reasoning, problem solving, and real-world applications using numerical, algebraic, and graphic models. Topics include problem-solving techniques, algebraic expressions, polynomials, linear equations, linear inequalities, linear and nonlinear graphs, systems of linear equations in two variables, integer exponents, proportions, and radicals.

**MATH 50A Beginning Algebra Part I (2)**

2 hours lecture

**Prerequisite:** A minimum grade of 'C' in MATH 15 or eligibility determined through the math placement process**Note:** Not open to students with credit in MATH 50

First part of Math 50 with emphasis on mathematical reasoning, problem solving, and real-world applications using numerical, algebraic, and graphical models. Topics include problem-solving techniques, algebraic expressions, polynomials, linear equations, linear inequalities, linear and nonlinear graphs, and natural number exponents.

- MATH 50B Beginning Algebra Part II** (2)  
2 hours lecture  
**Prerequisite:** A minimum grade of 'C' in MATH 50A  
**Note:** Not open to students with credit in MATH 50  
Second part of Math 50 with continued emphasis on mathematical reasoning, problem solving, and real-world applications, using numerical, algebraic, and graphical models. Topics include problem-solving techniques, algebraic expressions, polynomials, linear equations, linear inequalities, linear and nonlinear graphs, systems of linear equations in two variables, integer exponents, proportions, and radicals.
- MATH 55 Geometry** (4)  
4 hours lecture  
**Prerequisite:** A minimum grade of 'C' in either MATH 50 or MATH 50B or eligibility determined through the math placement process.  
Fundamentals of plane geometry and selected topics from solid geometry developed by both inductive and deductive processes. Especially recommended for prospective teachers and/or students who will be taking Trigonometry.
- MATH 56 Beginning/Intermediate Algebra** (6)  
6 hours lecture-2 hours laboratory  
**Prerequisite:** Eligibility determined through the math placement process  
**Note:** Not open to students with credit in MATH 60  
A review of elementary algebra and in-depth coverage of intermediate algebra intended for the student who has previous experience with algebra. Meets requirement for the A.A. degree. Meets prerequisite requirement for mathematics courses number 100-120, and 135.
- MATH 60 Intermediate Algebra** (4)  
4 hours lecture  
**Prerequisite:** A minimum grade of 'C' in either MATH 50 or MATH 50B or eligibility determined through the math placement process  
Graphic, numeric, analytic and applied perspectives on topics including linear, quadratic, exponential and logarithmic functions, exponents and radicals, linear and nonlinear systems of equations and inequalities.
- MATH 97 Mathematics Topics** (.5-4)  
Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture, laboratory, or lecture/laboratory may be scheduled by the department. Refer to Class Schedule.  
**Prerequisite:** A minimum grade of 'C' in either MATH 50 or MATH 50B, or eligibility determined through the Math Placement process.  
**Note:** May be taken 4 times  
Topics in Mathematics. See Class Schedule for specific topic offered. Course title will designate subject covered.
- MATH 100 Exploring Mathematics** (3)  
3 hours lecture  
**Prerequisite:** A minimum grade of 'C' in MATH 56 or MATH 60 or eligibility determined through the math placement process  
**Note:** May not be used to clear high school deficiency for students transferring to UC systems Fall 1994 or later  
**Transfer acceptability:** CSU; UC – MATH 100, 105 and 106 combined: maximum credit, one course  
Selected topics from logic, modern algebra, number theory, and geometry. Designed to give the student an introduction to the structure of mathematics and its applications. Recommended for liberal arts students.
- MATH 105 Concepts of Elementary Mathematics I** (3)  
3 hours lecture  
**Prerequisite:** A minimum grade of 'C' in MATH 56 or MATH 60 or eligibility determined through the math placement process  
**Transfer acceptability:** CSU; UC – MATH 100, 105 and 106 combined: maximum credit, one course; CAN MATH 4  
Selected topics from the real number system including properties and operations with integers and rational numbers as fractions and decimals. Additional topics include problem solving, numeration systems, number theory, and topics in logic and set theory. Recommended for prospective teachers.
- MATH 105L Concepts of Elementary Mathematics I Laboratory** (1)  
2 hours lecture/laboratory  
**Prerequisite:** Completion of, or concurrent enrollment in MATH 105  
**Transfer acceptability:** CSU  
This is a lab to accompany Math 105. The course focuses on children's mathematical thinking regarding topics in the Math 105 curriculum including, but not limited to, place value, arithmetic operations with whole numbers, fractions, and problem-solving strategies. Students view and analyze video clips of children being interviewed regarding their mathematical thinking, and students also interview children at the first and fourth/fifth grade levels, evaluating the strategies used and analyzing and reflecting upon the mathematical thinking involved. Recommended for prospective elementary and middle school teachers.
- MATH 106 Concepts of Elementary Mathematics II** (3)  
3 hours lecture  
**Prerequisite:** A minimum grade of 'C' in MATH 105  
**Transfer acceptability:** CSU; UC – MATH 100, 105 and 106 combined: maximum credit, one course  
An extension of Mathematics 105, including selected topics from two-and-three-dimensional geometry, motion geometry, and measurement. Recommended for prospective elementary and junior high school teachers, parents, and liberal arts students.
- MATH 110 College Algebra** (4)  
4 hours lecture  
**Prerequisite:** A minimum grade of 'C' in MATH 56 or MATH 60 or eligibility determined through the math placement process  
**Transfer acceptability:** CSU; UC – MATH 110 and 135 combined: maximum credit, 4 units; CAN MATH 10  
Study of the behavior and characteristics of functions from graphic, numeric, analytic and applied perspectives, including general polynomial functions, rational functions, exponential and logarithmic functions, and sequences. Systems of equations in several variables with an emphasis in matrix solutions.
- MATH 115 Trigonometry** (3)  
3 hours lecture  
**Prerequisite:** A minimum grade of 'C' in MATH 56 or MATH 60 or eligibility determined through the math placement process  
**Transfer acceptability:** CSU; CAN MATH 8  
The trigonometric functions and their applications including emphasis on the analytical aspects, identities, and trigonometric equations.
- MATH 120 Elementary Statistics** (3)  
3 hours lecture  
**Prerequisite:** A minimum grade of 'C' in MATH 56 or MATH 60 or eligibility determined through the math placement process  
**Transfer acceptability:** CSU; UC – MATH 120, BIOL 215, and PSYC/SOC 205, combined: maximum credit, one course; CAN STAT 2  
Selected topics include tabular and graphical representation of data, counting principles, permutations, combinations, discrete and continuous probability distributions, sampling distributions, the Central Limit Theorem, an introduction to inferential statistics, and simple linear regression analysis. Applications from the fields of business, economics, life sciences, social sciences, and the physical sciences.
- MATH 130 Calculus for the Social Sciences** (4)  
4 hours lecture  
**Prerequisite:** A minimum grade of 'C' in MATH 110 or eligibility determined through the math placement process  
**Note:** Not open to students with credit in MATH 140  
**Transfer acceptability:** CSU; UC – MATH 130 and 140 combined: maximum credit, one course; CAN MATH 30  
Functions and their graphs including exponential and logarithmic functions, single variable calculus, limits, differentiation, integration and their applications, multivariable calculus, with application to business, social sciences and behavioral science.

**MATH 135 Precalculus Mathematics (5)**

5 hours lecture

**Prerequisite:** A minimum grade of 'C' in MATH 115 or eligibility determined through the math placement process

**Transfer acceptability:** CSU; UC – MATH 110 and 135 combined: maximum credit, 4 units; CAN MATH 16

Designed for students who intend to take calculus. Emphasizes study of the behavior and characteristics of functions from graphic, numerical, analytic, and applied perspectives. Includes trigonometric functions, general polynomial functions, rational functions, exponential functions, logarithmic functions, absolute value functions, functions with rational exponents, and sequences. Selected topics from analytic geometry and linear systems are also presented.

**MATH 140 Calculus With Analytic Geometry, First Course (5)**

5 hours lecture

**Prerequisite:** A minimum grade of 'C' in MATH 135, or MATH 110 and MATH 115, or eligibility determined through the math placement process

**Transfer acceptability:** CSU; UC – MATH 130 and 140 combined: maximum credit, one course; CAN MATH 18; MATH 140+141=CAN MATH SEQ B; MATH 140+141+205=CAN MATH SEQ C

An introduction to analytic geometry, differentiation and integration of algebraic and transcendental functions of a single variable, and applications of differentiation.

**MATH 141 Calculus With Analytic Geometry, Second Course (4)**

4 hours lecture

**Prerequisite:** A minimum grade of 'C' in MATH 140

**Transfer acceptability:** CSU; UC; CAN MATH 20; MATH 140+141= CAN MATH SEQ B; MATH 140+141+205=CAN MATH SEQ C

Continuation of MATH 140. Topics include definite integrals and their applications; methods of integration (including the use of modern computational technology as appropriate); indeterminate forms; improper integrals; sequences; infinite series; Taylor series; conic sections; polar coordinate; and parametric equations from analytic, graphic, and numeric perspectives.

**MATH 146 Fortran-90 for Mathematics and Science (3)**

2 hours lecture 3 hours laboratory

**Prerequisite:** A minimum grade of 'C' in MATH 135 or MATH 110 and MATH 115, or a passing grade on the appropriate placement test

**Note:** Cross listed as CSIS 146.

**Transfer acceptability:** CSU; UC

Programming in FORTRAN 90 to solve typical problems in mathematics, computer science, physical sciences, and engineering. Programming is done on a PC.

**MATH 197 Mathematics Topics (.5-4)**

Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture, laboratory, or lecture/laboratory may be scheduled by the department. Refer to Class Schedule.

**Prerequisite:** A minimum grade of 'C' in either MATH 56 or MATH 60, or eligibility determined through the math placement process.

**Note:** May be taken 4 times

**Transfer acceptability:** CSU; UC – Credit determined by UC upon review of course syllabus.

Topics in Mathematics. See Class Schedule for specific topic offered. Course title will designate subject covered.

**MATH 200 Introduction to Linear Algebra (3)**

3 hours lecture

**Prerequisite:** A minimum grade of 'C' in MATH 141

**Transfer acceptability:** CSU; UC; CAN MATH 26

Matrices, determinants, vectors, linear dependence and independence, basis and change of basis, linear transformations, and eigen values.

**MATH 205 Calculus With Analytic Geometry, Third Course (4)**

4 hours lecture

**Prerequisite:** A minimum grade of 'C' in MATH 141

**Transfer acceptability:** CSU; UC; CAN MATH 22; MATH 140+141+205=CAN MATH SEQ C

Vectors in the plane and space, three-dimensional coordinate system and graphing, vector-valued functions and differential geometry, partial differentiation, multiple integration, and vector calculus.

**MATH 206 Calculus With Differential Equations (4)**

4 hours lecture

**Prerequisite:** A minimum grade of 'C' in MATH 205

**Transfer acceptability:** CSU; UC; CAN MATH 24

A first course in ordinary differential equations from analytic, geometric, numeric and applied perspectives (including the use of modern computational technology as appropriate). Topics include exact, separable, and linear equations; initial value and boundary-value problems; systems of first-order equations; reduction of order; undetermined coefficients; variation of parameters; series solutions; and Laplace transforms.

**MATH 245 Discrete Mathematics (3)**

3 hours lecture

**Prerequisite:** A minimum grade of 'C' in MATH 130 or MATH 140, or a passing score on the appropriate placement test

**Transfer acceptability:** CSU; UC

The study of propositional and predicate logic, number theory and methods of proof, elements of set theory, relations and functions, the Pigeonhole Principle, sequences, infinite sets, basic counting techniques, permutations, combinations, and applications directed to the field of computer science.

**Medical Assisting (MA)**

Contact the Life Sciences Department for further information, (760) 744-1150, ext. 2275

Associate in Arts degree requirements, Certificate of Achievement requirements, and Certificate of Proficiency requirements are listed in Section 6 (green pages) of the catalog.

**PROGRAMS OF STUDY**

**Administrative Medical Assisting**

Provides specific skills for entry level positions as an administrative assistant in a physician's office or a medical clinic.

**A.A. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT**

Program Requirements		Units
MA 50	Introduction to Medical Assisting	3
MA 55	Medical Terminology and Anatomy	3
MA 56	Medical Terminology and Anatomy	3
MA 60	Medical Insurance	3
BUS 105	Bookkeeping Fundamentals	3
BUS 125	Business English	3
OIS 101*	Beginning Keyboarding	0,3
OIS 102*	Intermediate Keyboarding	0,3
OIS 115	Filing and Records Management	1
OIS 205	Office Procedures	3
OIS 231.1	Medical Machine Transcription I	1
OIS 231.2	Medical Machine Transcription II	1
CE 100**	Cooperative Education	2

**TOTAL UNITS 26-32**

\* May be exempt by typing proficiency exam.

\*\* Cooperative Education must be related to this major.

## Clinical Medical Assisting

Provides specific skills for entry level positions as a clinical assistant in a physician's office or a medical clinic.

### A.A. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT

Program Requirements		Units
MA 50	Introduction to Medical Assisting	3
MA 55	Medical Terminology and Anatomy	3
MA 56	Medical Terminology and Anatomy	3
MA 65	Clinical Assisting: Patient Care	5
MA 66	Clinical Assisting: Diagnostic Procedures	5
MA 70	Supervised Clinical Experience	3.5
ZOO 145	Introduction to Anatomy and Physiology	3
BUS 125	Business English	3
OIS 101*	Beginning Keyboarding	0,3
<b>TOTAL UNITS</b>		<b>28.5 - 31.5</b>

\* May be exempt by typing proficiency exam.

### COURSE OFFERINGS

Courses numbered under 100 are not intended for transfer credit.

<b>MA 50</b>	<b>Introduction to Medical Assisting</b>	<b>(3)</b>
3 hours lecture History and development of the medical profession and its specialties. Roles and functions of the medical assistant and medical assisting organizations. Principles of interpersonal relationships, professional attitudes, medical ethics, and law. Reception and scheduling of patients.		
<b>MA 55</b>	<b>Medical Terminology and Anatomy</b>	<b>(3)</b>
3 hours lecture Basic medical terms with emphasis on word analysis and construction. Overview of anatomy and the pathological, diagnostic, therapeutic, and surgical terms related to the body as a whole and the integumentary, digestive, urinary, musculoskeletal, and male reproductive systems.		
<b>MA 56</b>	<b>Medical Terminology and Anatomy</b>	<b>(3)</b>
3 hours lecture Basic medical terms with emphasis on word analysis and construction. Overview of anatomy and the pathological, diagnostic, therapeutic and surgical terms related to the cardiovascular, respiratory, hematologic, endocrine, and female reproductive systems, and to oncology.		
<b>MA 60</b>	<b>Medical Insurance</b>	<b>(3)</b>
3 hours lecture Recommended preparation: MA 55 or 56 Provides entry-level skills training in medical insurance billing. Surveys private and government health and accident insurance plans and methods for preparing claim forms. Emphasis on compiling and extracting data for completion of forms.		
<b>MA 61</b>	<b>Medical Insurance Coding</b>	<b>(3)</b>
2 hours lecture-3 hours laboratory <b>Prerequisite:</b> Completion of, or concurrent enrollment in, MA 55 or 56 Diagnosis and medical procedure coding utilizing International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and Current Procedural Terminology 4 (CPT-4) coding guidelines. Includes abstracting information from the medical record, utilizing computer coding techniques, and knowledge of strategies to promote accurate reimbursement of medical claims.		
<b>MA 65</b>	<b>Clinical Assisting: Patient Care</b>	<b>(5)</b>
3 hours lecture 6 hours laboratory Preparation of patients and assisting physician with examinations, minor surgical procedures, and treatments. Recording medical histories and observations.		

Principles and methods of aseptic procedures, handling and care of instruments and supplies. Pharmacology with emphasis on preparation and administration of medication.

### MA 66 Clinical Assisting: Diagnostic Procedures (5)

3 hours lecture 6 hours laboratory

Laboratory orientation and preparation of patients for diagnostic procedures. Specimen collection and handling. Basic urine and hematological tests. Emergency procedures.

### MA 70 Supervised Clinical Experience (3.5)

10½ hours laboratory

**Prerequisite:** A minimum grade of 'C' in MA 50, 55, 56, 65 and 66. Current CPR Basic 'C' Certificate. A Physical Examination and Physician's Report (free of infectious disease and physically and emotionally able to perform the duties of the MA 70 class). Proof of the following: Tuberculin Test (PPD), Tetanus/Diphtheria immunization, Rubella/Measles Vaccine, and Hepatitis B Vaccine (first in the series of 3 must be received a minimum of 10 days prior to day 1 of MA 70 class). Must be 18 years of age prior to day 1 of clinical experience.

Supervised clinical (back office) experience in the physician's office, clinic, laboratory, or other appropriate health care facility. Students will assist the physician and medical staff to provide patient care, diagnostic procedures, and perform other duties delegated to the entry-level medical assistant with consideration of the ethical and legal implications. Clinical skills not prohibited by California regulations or the Clinical Laboratory Improvement Act of 1988 will be performed.

### MA 97 Medical Assisting Topics (.5-4)

Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture, laboratory, or lecture/laboratory may be scheduled by the department. Refer to Class Schedule.

**Note:** May be taken 4 times

Topics in Medical Assisting. See Class Schedule for specific topic offered. Course title will designate subject covered.

## Microbiology (MICR)

Contact the Life Sciences Department for further information, (760) 744-1150, ext. 2275

### COURSE OFFERINGS

#### MICR 110 Microbiology and Foods (3)

2 hours lecture - 2 hours lecture/laboratory

**Note:** Cross listed as FCS 110

**Transfer acceptability:** CSU

Introduction to the principles of microbiology with an emphasis on foodborne pathogens. Students will explore biological factors and controls relating to reproduction of microorganisms and the effects on public health. This course does not meet microbiology requirement for pre-health students.

#### MICR 197 Microbiology Topics (.5-4)

Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture, laboratory, or lecture/laboratory may be scheduled by the department. Refer to Class Schedule.

**Note:** May be taken 4 times

**Transfer acceptability:** CSU

Topics in Microbiology. See Class Schedule for specific topic offered. Course title will designate subject covered.

#### MICR 200 Fundamentals of Microbiology (5)

3 hours lecture 6 hours laboratory

**Prerequisite:** BIOL 102; or BIOL 200 and CHEM 100; or BIOL 100 and CHEM 100; or BIOL 105 and CHEM 100; or BIOL 101/101L and CHEM 100

**Transfer acceptability:** CSU; UC; CAN BIOL 14

Fundamentals of microbiology including medical aspects of microbiology.

## Multicultural Studies (MCS)

See also **Africana Studies, American Indian Studies, Chicano Studies, Judaic Studies**

Contact the Multicultural Studies Department for further information, (760) 744-1150, ext. 2206

### COURSE OFFERINGS

#### MCS 100 Introduction to Multicultural Studies (3)

3 hours lecture

**Transfer acceptability:** CSU; UC

Social, cultural and political awareness of diverse national and international systems of thought and multicultural groups as revealed through their social institutions and cultural traditions emanating from family, community and nation - state.

#### MCS 110 Diverse Cultures in America Today (3)

3 hours lecture

**Note:** Cross listed as AMS 110

**Transfer acceptability:** CSU; UC

An investigation of prevalent cultural trends in four groups of diverse ethnic and cultural backgrounds in America -- African Americans, Latinos, Chinese, and people of Jewish heritage -- since World War II. Emphasis will be placed on the literary, musical, and artistic expressions of their heritage, social conditions, struggle to become part of the main culture, and response to prejudice, racial, and religious discrimination. Selections dealing with social conditions will include such diverse issues as family life, intergenerational conflicts, and religious traditions.

#### MCS 122 Survey of Middle Eastern History (3)

3 hours lecture

**Transfer acceptability:** CSU; UC

A survey of the history, cultures and religions of the Arab world including the emergence of Islam as a major world religion, and the impact of the Arab conquests on the Mediterranean world.

#### MCS 165 Introduction to Asian American Studies (3)

3 hours lecture

**Transfer acceptability:** CSU; UC

This course is an introduction to Asian American Studies. It focuses on the lives and experiences of Asian Americans in the United States. It surveys the history of immigration and cultural assimilation of the different Asian American groups in the U.S. As such, the course will utilize historical perspectives, literature, and film to examine the Asian American experience and the changing roles and contributions of Asian Americans in American society.

#### MCS 197 Multicultural Studies Topics (.5-4)

Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture, laboratory, or lecture/laboratory may be scheduled by the department. Refer to Class Schedule.

**Note:** May be taken 4 times

**Transfer acceptability:** CSU; UC – Credit determined by UC upon review of course syllabus.

Topics in Multicultural Studies. See Class Schedule for specific topic offered. Course title will designate subject covered.

#### MCS 200 Race, Class, and Ethnic Groups in America (3)

3 hours lecture

**Note:** Cross listed as AMS/SOC 200

**Transfer acceptability:** CSU; UC

This course is designed to introduce the topics of intergroup relations in general to superordinate-subordinate relations in particular, as exemplified in various racial, ethnic, social class, and cultural groups. Emphasis is primarily on contemporary relations in the United States, although a comparative perspective is also offered.

## Music (MUS)

Contact the Performing Arts Department for further information, (760) 744-1150, ext. 2316. For transfer information, consult a Palomar College counselor.

Associate in Arts degree requirements, Certificate of Achievement requirements, and Certificate of Proficiency requirements are listed in Section 6 (green pages) of the catalog.

### PROGRAMS OF STUDY

#### Digital Animation, Compositing, and Music

This program is directed at the digital design and implementation of 3D animations, graphic compositing and music.

### CERTIFICATE OF PROFICIENCY

Program Requirements	Units
<b>(5 courses minimum required, 15 units total)</b>	
ARTI 246 Digital 3D Design and Modeling	3
ARTI 247 Digital 3D Design and Animation	3
GC 204 Motion Graphics for Multimedia-A	3
GC 213 Motion Graphics Production and Compositing	3
MUS 180 Computer Music I	3
MUS 184 Electronic Ensemble	3
<b>TOTAL UNITS</b>	<b>15</b>

Digital Animation, Compositing, and Music Certificate of Proficiency is also listed in Art and in Graphic Communications.

#### Kodaly Music Education

Provides training in the Kodaly approach for teaching children with an emphasis on the singing voice, music literacy, and the pedagogical uses of folk songs.

### CERTIFICATE OF PROFICIENCY

Program Requirements	Units
MUS 240 Solfege I	1
MUS 241 Solfege II	1
MUS 242 Solfege III	2
MUS 243 Folk Song Research	3
MUS 245 Kodaly I	3
MUS 246 Kodaly II	3
MUS 247 Kodaly III	3
MUS 248 Kodaly Choral Analysis	1
<b>TOTAL UNITS</b>	<b>17</b>

Recommended Electives: MUS 115, 130.

## Music

Students pursuing a music major will take the following required courses. Transfer students should consult the four year college or university catalog for specific requirements or see a Palomar College counselor.

Note: MUS 103 is recommended for students who need preparation for Music Theory I.

### A.A. DEGREE MAJOR

Program Requirements	Units
MUS 100 or Music Appreciation	
MUS 166 and Orientation in Music History and Literature I	3,6
MUS 167 Orientation in Music History and Literature II	3,6
MUS 105 Music Theory I	3

MUS 106	Music Theory II	3
MUS 210	Advanced Harmony	3
MUS 211	Counterpoint	3
MUS 110	Music Skills I	1
MUS 111	Music Skills II	1
MUS 215	Music Skills III	1
MUS 216	Music Skills IV	1

**Group One (Select 12 units)**

MUS 134 158,177, 178,184,198	Performance Ensembles	4
MUS 180	Computer Music I	3
MUS 181	Computer Music II	3
MUS 220	Applied Music	3
MUS 222	Performance Studies	4

**Group Two (Select 4-5 units)**

MUS 115	Basic Keyboard I	2
MUS 116	Accelerated Basic Keyboard	3
MUS 117	Basic Keyboard II	2
MUS 119	Piano Skills I	2
MUS 225	Piano Skills II	2

**Group Three (Select 3 units)**

MUS 101	Survey of 20th Century Music	3
MUS 171	World Music	3

**TOTAL UNITS 38 - 42**

Recommended Elective: DNCE/MUS/TA 173

**COURSE OFFERINGS**

An activity may be taken four times for credit. Activity is defined to include all ability levels. (e.g., A student may take a total of only four Keyboard courses for credit.) Keyboard, Piano skills, Vocal, Brass Instruments, Woodwind Instruments, Guitar, Choir, Concert Band, Jazz, Chamber Ensemble, String Orchestra, and Symphonic Youth Orchestra are defined as activity courses.

Courses numbered under 100 are not intended for transfer credit.

**MUS 96A Special Projects: Performance (1)**

3 hours laboratory  
**Prerequisite:** Enrollment subject to audition  
**Note:** May be taken 4 times  
 Participation in group or solo performances beyond those normally expected in individual study classes.

**MUS 96B Special Projects: Research (1,2,3)**

1, 2, or 3 hours lecture  
**Prerequisite:** MUS 105  
**Note:** May be taken 2 times  
 Special study in the areas of music theory, composition, history, or literature.

**MUS 97D Music Topics (.5-4)**

Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture, laboratory, or lecture/laboratory may be scheduled by the department. Refer to Class Schedule.  
**Note:** May be taken 4 times  
 Topics in Music. See Class Schedule for specific topic offered. Course title will designate subject covered.

**MUS 100 Music Appreciation (3)**

3 hours lecture  
**Transfer acceptability:** CSU; UC  
 A practical approach to music listening with a brief survey of music of all periods, styles, and media.

**MUS 101 Survey of 20th Century Music (3)**

3 hours lecture  
**Transfer acceptability:** CSU; UC  
 Music from the mid 19th Century to the recent avant garde, with emphasis on understanding the issues and philosophies of modern musical thought.

**MUS 102 Introduction to Jazz (3)**

3 hours lecture  
**Transfer acceptability:** CSU; UC  
 Surveys the history and characteristics of the music developed in the United States including blues, ragtime, swing, bebop, jazz, rock, and other trends in jazz. Designed for the student to become an active listener in the form, and to develop aesthetic criteria for examining and evaluating jazz performances.

**MUS 103 Fundamentals of Music (3)**

3 hours lecture  
**Transfer acceptability:** CSU; UC  
 Training in the fundamentals of music, primarily for the non music major. The course of study includes a thorough acquaintance with scales, intervals, keys and triads, as well as development in ability to sight read simple melodic material and take simple melodic dictation.

**MUS 105 Music Theory I (3)**

3 hours lecture 2 hours laboratory  
**Corequisite:** MUS 110  
**Transfer acceptability:** CSU; UC  
 Analysis and written work in melodic, rhythmic, and harmonic structure of music. Includes review of music rudiments and study of structure and harmonic usage of triads. Required concert attendance.

**MUS 106 Music Theory II (3)**

3 hours lecture 2 hours laboratory  
**Prerequisite:** MUS 105  
**Corequisite:** MUS 111  
**Transfer acceptability:** CSU; UC  
 Continuation of MUS 105, extending analysis and written work into all aspects of diatonic harmony, secondary dominants, and elementary modulation. Music literacy is developed through listening and score reading assignments. Required concert attendance.

**MUS 110 Music Skills I (1)**

1 hour lecture 3 hours laboratory  
**Prerequisite:** Ability to read and write basic music notation  
**Transfer acceptability:** CSU; UC  
 Melodic and rhythmic sight reading and dictation. Required concert attendance. Required for students with a major in music, but open to all students.

**MUS 111 Music Skills II (1)**

1 hour lecture 3 hours laboratory  
**Prerequisite:** MUS 110  
**Transfer acceptability:** CSU; UC  
 Continuation of MUS 110 and harmonic dictation. Required concert attendance. Required for students with a major in music, but open to all students.

**MUS 115 Basic Keyboard I (2)**

4 hours lecture/laboratory  
**Note:** May be taken 4 times; maximum of 4 completions in any combination of MUS 115, MUS 116, MUS 117  
**Transfer acceptability:** CSU; UC  
 An introduction to the keyboard through the study of notation, basic hand positions, and chord formations.

**MUS 116 Accelerated Basic Keyboard (3)**

6 hours lecture/laboratory  
**Prerequisite:** Ability to read music in treble and bass clefs  
**Note:** May be taken 4 times; maximum of 4 completions in any combination of MUS 115, MUS 116, MUS 117  
**Transfer acceptability:** CSU; UC

Accelerated class for the beginning keyboard student. Required of all students with a major in music and for music credential candidates.

**MUS 117 Basic Keyboard II (2)**

4 hours lecture/laboratory

**Prerequisite:** MUS 115 or the passing of equivalency test

**Note:** May be taken 4 times; maximum of 4 completions in any combination of MUS 115, MUS 116, MUS 117

**Transfer acceptability:** CSU; UC

Keyboard experience through the further study of notation, scales, and chord progressions. Sight reading and improvisation.

**MUS 119 Piano Skills I (2)**

4 hours lecture/laboratory

**Prerequisite:** MUS 117 or the passing of equivalency test

**Note:** May be taken 4 times; maximum of 4 completions in any combination of MUS 119, MUS 225

**Transfer acceptability:** CSU; UC

Piano techniques including scales and arpeggios, sight reading, and ensemble playing. Required of all music majors and for credential candidates.

**MUS 123 Arts Across the Curriculum (3)**

3 hours lecture

**Note:** Cross listed as: ART/DNCE/TA 123

**Transfer acceptability:** CSU

This course is an introduction to the artistic creative process through a comparative study of dance, music, theatre, and visual arts, within a social and cultural context. The principles of artistic perception, creative expression, cultural and historical context, and aesthetic valuing will be discussed.

**MUS 125 Musicianship for Elementary Teachers (3)**

3 hours lecture

**Transfer acceptability:** CSU

Skills and competencies required in the elementary school classroom including basic music theory, sight singing, classroom instruments, voice, and a useful repertoire of songs selected from State adopted music textbooks. It is recommended that students lacking a basic knowledge of the piano enroll in MUS 115 concurrently.

**MUS 126 Palomar Chorale Ensemble (1)**

3 hours laboratory

**Prerequisite:** Enrollment subject to audition

**Note:** May be taken 4 times

**Transfer acceptability:** CSU; UC

Rehearsal and performance of standard choral literature. Attendance at all scheduled performances is required.

**MUS 130 Fundamental Vocal Skills (1)**

2 hours lecture/laboratory

**Note:** May be taken 4 times; maximum of 4 completions in any combination of MUS 130, MUS 131, MUS 132

**Transfer acceptability:** CSU; UC

Introduction to the basics of singing. Includes proper breath control and posture, practice techniques, diction, and performance of simple song literature.

**MUS 131 Vocal Literature and Performance (1)**

2 hours lecture/laboratory

**Prerequisite:** MUS 130

**Note:** May be taken 4 times; maximum of 4 completions in any combination of MUS 130, MUS 131, MUS 132

**Transfer acceptability:** CSU; UC

Establishment of a basic repertoire for the singer. Rehearsal and performance of folk songs; musical theatre; and Italian, German, French, and English art songs.

**MUS 132 Popular Vocal Technique (1)**

2 hours lecture/laboratory

**Prerequisite:** MUS 130

**Note:** May be taken 4 times; maximum of 4 completions in any combination of

MUS 130, MUS 131, MUS 132

**Transfer acceptability:** CSU; UC

Development of individual style in popular music. Scat singing, microphone technique, and expansion of repertoire.

**MUS 134 Palomar Women's Chorus (1)**

3 hours laboratory

**Prerequisite:** Enrollment subject to audition

**Note:** May be taken 4 times

**Transfer acceptability:** CSU; UC

Rehearsal and performance of standard choral literature for women's voices. Trips to college choir festivals and performances in the community and at Palomar College.

**MUS 137 Cuban and Brazilian Drumming (1, 1.5, 2)**

2, 3 or 4 hours lecture/laboratory

**Note:** Cross listed as DNCE 137; Maximum of 4 completions in any combination of DNCE/MUS 137 and DNCE/MUS 138

**Transfer acceptability:** CSU; UC

Drum, percussion and song classes in the traditions of Escola de Samba from Rio de Janeiro, Brazil and Afro-Cuban traditions, Rumba, Congo, makuta from Cuba. Develop ability to work as part of a drum ensemble.

**MUS 138 Cuban and Brazilian Drumming II (1, 1.5, 2)**

2, 3, or 4 hours lecture/laboratory

**Prerequisite:** DNCE/MUS 137

**Note:** Cross listed as DNCE 138; Maximum of 4 completions in any combination of DNCE/MUS 137 and DNCE/MUS 138

**Transfer acceptability:** CSU; UC

Intermediate level drum, percussion and song classes in the traditions of Escola de Samba from Rio de Janeiro, Brazil and Afro-Cuban traditions, Rumba, Congo, makuta from Cuba. Develop ability to work as part of a drum ensemble.

**MUS 143 Palomar Chorale Chamber Ensemble (.5, 1)**

1/2 or 3 hours laboratory

**Prerequisite:** Enrollment subject to audition with emphasis on vocal ability and music reading

**Note:** May be taken 4 times

**Transfer acceptability:** CSU

Rehearsal and performance of choral and chamber music for voices. Attendance at all scheduled performances is required.

**MUS 147 Concert Choir (1)**

3 hours laboratory

**Prerequisite:** Previous singing experience

**Note:** May be taken 4 times; maximum of 4 completions in any combination of MUS 147, MUS 148, MUS 149

**Transfer acceptability:** CSU; UC

Rehearsal and performance of standard choral literature. Trips to college choir festivals and performances in the community and at Palomar College.

**MUS 148 Palomar Chorale (1)**

3 hours laboratory

**Prerequisite:** Enrollment subject to audition

**Note:** May be taken 4 times; maximum of 4 completions in any combination of MUS 147, MUS 148, MUS 149

**Transfer acceptability:** CSU; UC

Rehearsal and performance of standard oratorio and choral literature. Attendance at all scheduled performances is required.

**MUS 149 Spectrum Pop/Jazz Singers (1)**

3 hours laboratory

**Prerequisite:** Enrollment subject to audition

**Note:** May be taken 4 times; maximum of 4 completions in any combination of MUS 147, MUS 148, MUS 149

**Transfer acceptability:** CSU; UC

A group of singers specializing in the performance of jazz, gospel, rock, musical theatre, and popular music. Improvement of musicianship and concept of style.

The ensemble gives campus and community concerts. Attendance at all scheduled performances is required.

**MUS 150 Musical Theatre – Vocal** (.5,1)

*1½ or 3 hours laboratory*

**Prerequisite:** Enrollment subject to audition

**Note:** May be taken 4 times

**Transfer acceptability:** CSU; UC

Rehearsal and performance of vocal musical theatre literature. Attendance at all scheduled rehearsals and productions is required.

**MUS 151 Concert Band** (1)

*3 hours laboratory*

**Prerequisite:** Ability to perform on one or more band instruments

**Note:** May be taken 4 times; maximum of 4 completions in any combination of MUS 151, MUS 161

**Transfer acceptability:** CSU; UC

Study, rehearsal, and performance of standard concert band music.

**MUS 152 Jazz Ensemble** (1)

*3 hours laboratory*

**Prerequisite:** Ability to perform on one or more instruments and read music.

Enrollment subject to audition

**Note:** May be taken 4 times

**Transfer acceptability:** CSU; UC

Rehearsal and performance of standard stage band literature. Opportunities for students to arrange and compose for the band and rehearse the ensemble. Attendance at all scheduled performances is required.

**MUS 155 Chamber Ensemble – Brass** (1)

*3 hours laboratory*

**Prerequisite:** Ability to perform on one or more instruments and to sight read music

**Note:** May be taken 4 times

**Transfer acceptability:** CSU; UC

Rehearsal and performance of chamber music literature for brass.

**MUS 156 Chamber Ensemble – Strings** (.5,1)

*1½ or 3 hours laboratory*

**Prerequisite:** Ability to perform on one or more instruments and to sight read music

**Note:** May be taken 4 times

**Transfer acceptability:** CSU; UC

Rehearsal and performance of chamber music literature for strings.

**MUS 157 Guitar Ensembles** (1)

*2 hours lecture/laboratory*

**Prerequisite:** Enrollment subject to audition with emphasis on music reading

**Note:** May be taken 4 times

**Transfer acceptability:** CSU; UC

Performance practice considerations for ensemble music from various periods of music history, with an emphasis on music reading and classical technique.

**MUS 158 Chamber Singers** (.5,1)

*1½ or 3 hours laboratory*

**Prerequisite:** Enrollment subject to audition with emphasis on vocal ability and music reading

**Note:** May be taken 4 times

**Transfer acceptability:** CSU; UC

Rehearsal and performance of chamber music for voices.

**MUS 159 Musical Theatre Orchestra** (.5,1)

*1½ or 3 hours laboratory*

**Prerequisite:** Enrollment subject to audition; ability to play an instrument and read music at sight

**Note:** May be taken 4 times

**Transfer acceptability:** CSU; UC

Rehearsal and performance of musical theatre literature. Attendance at all scheduled productions is required.

**MUS 161 Summer Concert Band** (.5)

*1½ hours laboratory*

**Prerequisite:** Ability to perform on one or more instruments

**Note:** May be taken 4 times; maximum of 4 completions in any combination of MUS 151, MUS 161

**Transfer acceptability:** CSU; UC

Study, rehearsal, and performance of standard concert band music.

**MUS 162 Summer Stage Band** (.5)

*1½ hours laboratory*

**Prerequisite:** Ability to perform on an instrument and read music

**Note:** May be taken 4 times

**Transfer acceptability:** CSU; UC

Extensive reading and rehearsing of jazz and jazz rock literature.

**MUS 163 Summer Pops Orchestra** (.5)

*1½ hours laboratory*

**Prerequisite:** Enrollment subject to audition; ability to play an instrument and read music

**Note:** May be taken 4 times

**Transfer acceptability:** CSU; UC

Study, rehearsal, and performance of popular orchestral literature including musical theatre and light classics literature. Attendance at scheduled outdoor concerts is required.

**MUS 166 Orientation in Music History and Literature I** (3)

*3 hours lecture*

**Prerequisite:** MUS 105

**Transfer acceptability:** CSU; UC

An introductory course in the literature and history of music from the Middle Ages to 1750.

**MUS 167 Orientation in Music History and Literature II** (3)

*3 hours lecture*

**Prerequisite:** MUS 105

**Transfer acceptability:** CSU; UC

An introductory course in the literature and history of music from 1750 to the present.

**MUS 170 Great Musicians Through Film** (3)

*3 hours lecture*

**Transfer acceptability:** CSU; UC

The study of the life and compositions of such composers as Bach, Mozart, Beethoven, Schumann, Bruckner, and Stravinsky through documentary and biographical films accompanied by lectures and discussions as well as biographical film sketch of Anthon Rubenstein.

**MUS 171 World Music** (3)

*3 hours lecture*

**Transfer acceptability:** CSU; UC

A survey of world music including North American Indian, Mexico, India, Japan, Indonesia, Middle East, China, Africa, and South America, with emphasis on understanding the cultural background, instruments, musical characteristics and the impact of world music on the 20th century culture.

**MUS 172 Repertory Jazz Ensemble** (1)

*3 hours laboratory*

**Prerequisite:** Enrollment subject to audition

**Note:** May be taken 4 times

**Transfer acceptability:** CSU

Study and preparation of professional level materials for the large jazz ensemble.

**MUS 173 Musical Theatre Scenes** (1)

*3 hours laboratory*

**Note:** Cross listed as DNCE/TA 173

**Transfer acceptability:** CSU

Rehearsal and performance of solo and group scenes from Broadway musicals dating from the 1930's to the present.

- MUS 175 Beginning Guitar** (1)  
2 hours lecture/laboratory  
**Note:** May be taken 4 times; maximum of 4 completions in any combination of MUS 175, MUS 176, MUS 177, 178  
**Transfer acceptability:** CSU; UC  
An introduction to the fingerboard through the study of notation, basic hand positions, and chord formations.
- MUS 176 Intermediate Guitar** (1)  
2 hours lecture/laboratory  
**Prerequisite:** MUS 175  
**Note:** May be taken 4 times; maximum of 4 completions in any combination of MUS 175, MUS 176, MUS 177, 178  
**Transfer acceptability:** CSU; UC  
A continuation of MUS 175 with a more in-depth study of the classical, flamenco, blues, and jazz styles. Theory, technique, and interpretation will be thoroughly explored.
- MUS 177 Studio Guitar** (1)  
2 hours lecture/laboratory  
**Prerequisite:** MUS 175 or knowledge of basic guitar chords  
**Note:** May be taken 4 times; maximum of 4 completions in any combination of MUS 175, MUS 176, MUS 177, 178  
**Transfer acceptability:** CSU; UC  
Guitar techniques in popular styles, including strumming and fingerpicking accompaniments to songs as well as the creation of solo arrangement.
- MUS 178 Classical Guitar** (1)  
2 hours lecture/laboratory  
**Prerequisite:** MUS 175 or ability to read music  
**Note:** May be taken 4 times; maximum of 4 completions in any combination of MUS 175, MUS 176, MUS 177, 178  
**Transfer acceptability:** CSU; UC  
Guitar techniques in the classical style, with emphasis on sight reading and ensemble playing as well as performance of guitar literature from the Renaissance through the early 20th Century.
- MUS 180 Computer Music I** (3)  
6 hours lecture/laboratory  
**Prerequisite:** MUS 103 or 115 or ARTI 246 or GC 204  
**Transfer acceptability:** CSU  
This course is designed to give students an understanding of basic computer music application including sound design, MIDI, and music notation software.
- MUS 181 Computer Music II** (3)  
6 hours lecture/laboratory  
**Prerequisite:** Completion of, or concurrent enrollment in, MUS 180  
**Transfer acceptability:** CSU  
An overview of digital audio techniques. Topic in sound synthesis, sound design, and sampling.
- MUS 182 Introduction to Arts Management** (3)  
9 hours laboratory  
**Note:** Cross listed as AMS/ART/DNCE/TA 182  
**Transfer acceptability:** CSU  
An introduction to the principles and practices of arts management through an interdisciplinary study of management topics in the visual and performing arts.
- MUS 183 Internship in Arts Management** (3)  
9 hours laboratory  
**Prerequisite:** AMS/ART/DNCE/MUS/TA 182  
**Note:** Cross listed as AMS/ART/DNCE/TA 183  
**Transfer acceptability:** CSU  
Practical experience in arts management in the visual and performing arts.
- MUS 184 Electronic Ensemble** (3)  
6 hours lecture/laboratory  
**Prerequisite:** MUS 103  
**Note:** May be taken 4 times  
**Transfer acceptability:** CSU  
This course includes instruction in music technology, composition, and performance. Students will compose and participate in performances of original works for electronic, computer, and acoustic instruments.
- MUS 197 Topics in Music** (.5-3)  
Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture, laboratory, or lecture/laboratory may be scheduled by the department. Refer to Class Schedule.  
**Note:** May be taken 4 times for a maximum of 9 units  
**Transfer acceptability:** CSU; UC – Credit determined by UC upon review of course syllabus.  
Workshops in various special topics in music.
- MUS 198 Palomar Symphony Orchestra** (.5,1)  
1½ or 3 hours laboratory  
**Prerequisite:** Enrollment subject to audition  
**Note:** May be taken 4 times  
**Transfer acceptability:** CSU; UC  
Study, rehearsal, and performance of a wide variety of orchestral literature from the Baroque, Classical, Romantic, and 20th Century styles. Attendance at all scheduled performances is required.
- MUS 210 Advanced Harmony** (3)  
3 hours lecture 2 hours laboratory  
**Prerequisite:** MUS 106  
**Corequisite:** MUS 215  
**Transfer acceptability:** CSU; UC  
Analysis and written work in altered chords, chromatic harmony, modulation, structural form (sonata allegro), and 20th Century developments. Required concert attendance.
- MUS 211 Counterpoint** (3)  
3 hours lecture 2 hours laboratory  
**Prerequisite:** MUS 210  
**Corequisite:** MUS 216  
**Transfer acceptability:** CSU; UC  
Analysis and written work in two and three voice counterpoint in the 18th Century style (invention and fugue). Required concert attendance.
- MUS 215 Music Skills III** (1)  
1 hour lecture 3 hours laboratory  
**Prerequisite:** MUS 111  
**Transfer acceptability:** CSU; UC  
Continuation of MUS 111 and four part harmonic dictation. Introduction to chromatic dictation. Required for students with a major in music, but open to all students.
- MUS 216 Music Skills IV** (1)  
1 hour lecture 3 hours laboratory  
**Prerequisite:** MUS 215  
**Note:** May be taken 3 times  
**Transfer acceptability:** CSU; UC  
Continuation of MUS 215 and contrapuntal dictation. Required for students with a major in music, but open to all students.
- MUS 220 Applied Music** (3)  
6 hours lecture/laboratory  
**Corequisite:** MUS 222 and at least one music ensemble (MUS 134 198)  
**Note:** May be taken 4 times  
**Transfer acceptability:** CSU; UC  
Individual lessons with music instructor developing basic techniques in applied music. Student is required to practice on campus, be concurrently enrolled in a music ensemble, participate in Performance Studies class, and perform for music juries at the conclusion of the semester.

- MUS 222 Performance Studies** (1)  
2 hours lecture/laboratory  
**Note:** May be taken 4 times  
**Transfer acceptability:** CSU; UC  
A combination of private studio instruction in instrument or voice with an off campus instructor, plus on campus training in performance skills.
- Required conditions:
1. Fourteen clock hours of instruction with a private instructor and adequate practice time are required.
  2. At the end of the semester the student will be required to perform for the Music Faculty.
  3. Student should have necessary skills and technique on chosen instrument to begin training in public performance.
 

a. Piano	m. Baritone Horn
b. Harpsichord	n. Tuba
c. Organ	o. Percussion
d. Voice	p. Violin
e. Flute	q. Viola
f. Oboe	r. Cello
g. Clarinet	s. Contrabass
h. Saxophone	t. Harp
i. Bassoon	u. Classical Guitar
j. French Horn	v. Classical Accordion
k. Trumpet	w. Studio Guitar
l. Trombone	
- MUS 225 Piano Skills II** (2)  
4 hours lecture/laboratory  
**Prerequisite:** MUS 119 or the passing of equivalency test  
**Note:** May be taken 4 times; maximum of 4 completions in any combination of MUS 119, MUS 225  
**Transfer acceptability:** CSU; UC  
Continuation of piano techniques with emphasis on improvised accompaniments, sight reading, ensemble playing, pedaling, and practice techniques.
- MUS 227 Accompanying** (1)  
3 hours laboratory  
**Prerequisite:** MUS 225 or the passing of equivalency test  
**Note:** May be taken 4 times  
**Transfer acceptability:** CSU  
Techniques of, and practical experience in, piano accompaniment for ensembles, vocalists, and instrumentalists.
- MUS 240 Solfege I** (1)  
1 hour lecture  
**Note:** May be taken 2 times  
**Transfer acceptability:** CSU  
This beginning skills course will focus on sight-singing, ear training, keyboard and written skills to develop the ability to sing at sight by means of relative and absolute solmization, recognition of pitches and intervals with accurate intonation.
- MUS 241 Solfege II** (1)  
1 hour lecture  
**Prerequisite:** MUS 240  
**Note:** May be taken 2 times  
**Transfer acceptability:** CSU  
Review sight-reading and writing in pentatonic scales and progress to major and minor scales, continuing to focus on sight-singing, ear training, keyboard and written scales using relative and absolute solmization.
- MUS 242 Solfege III** (2)  
2 hours lecture  
**Prerequisite:** MUS 240 and 241  
**Note:** May be taken 2 times  
**Transfer acceptability:** CSU  
Review sight-reading and writing in pentatonic, major and minor scales, and progress to chromaticism, modulation and Greek modes; continue sight-singing, ear training, keyboard and written scales using relative and absolute solmization, harmonic analysis, composition, rounds, part-singing, and dictation.
- MUS 243 Folk Song Research** (3)  
3 hours lecture  
**Prerequisite:** MUS 240, 241, 245 and 246  
**Transfer acceptability:** CSU  
Introduction to categorization and analysis of folk songs in the United States. Survey of five major folk song categories found in the United States including: Native American, Hispanic, Asian, African-American, and Anglo music. Introduction to techniques of folk song research and analysis with concentration on research skills leading to the completion of a paper on a topic within folk song study.
- MUS 245 Kodaly I** (3)  
3 hours lecture  
**Note:** May be taken 2 times  
**Transfer acceptability:** CSU  
An in-depth study of the Kodaly approach to music education, with particular emphasis on philosophy and methodology. Special attention is given to the sequencing of concepts and lesson planning for the implementation of the kindergarten and first grade levels.
- MUS 246 Kodaly II** (3)  
3 hours lecture  
**Prerequisite:** MUS 245  
**Note:** May be taken 2 times  
**Transfer acceptability:** CSU  
An in-depth study of the Kodaly approach to music education, with particular emphasis on philosophy and methodology. Special attention is given to the sequencing of concepts and lesson planning for the implementation of the second and third grade concepts.
- MUS 247 Kodaly III** (3)  
3 hours lecture  
**Prerequisite:** MUS 245 and 246  
**Note:** May be taken 2 times  
**Transfer acceptability:** CSU  
An in-depth study of the Kodaly approach to music education for grades four through university and adult levels, with particular emphasis on philosophy and methodology. Special attention is given to the sequencing of concepts and lesson planning for the implementation of advanced musical concepts.
- MUS 248 Kodaly Choral Analysis** (1)  
1 hour lecture  
**Prerequisite:** Basic singing and sight reading experience  
**Note:** May be taken 2 times  
**Transfer acceptability:** CSU  
Sight-singing and part-singing techniques will be stressed. Study choral rehearsal planning, conducting techniques, and analysis of choral literature for elementary, junior high, and senior high choirs. Vocal training for participants and vocal pedagogy for children emphasized.
- MUS 250 Choral Conducting** (.5)  
1 hour lecture/laboratory  
**Prerequisite:** MUS 105 or MUS 245 or experience in conducting choirs  
**Transfer acceptability:** CSU  
Practical conducting methods for choral musicians. Discussion and study of issues concerning musical rehearsal and performance with treble, SAB and SATB choral ensembles.
- MUS 251 Master Class in Keyboard Literature, Analysis and Performance** (.5,1,1.5,2,3)  
1, 2, 3, 4, or 6 hours lecture/laboratory  
**Prerequisite:** MUS 225 or the passing of equivalency test  
**Transfer acceptability:** CSU  
Survey of keyboard literature presented in a master class format. Analysis of styles and techniques of solo and ensemble performances.

## Nursing Education (NURS)

Contact the Nursing Education Department for further information, (760) 744-1150, ext. 2580. For transfer information, consult a Palomar College counselor.

Associate in Arts degree requirements, Certificate of Achievement requirements, and Certificate of Proficiency requirements are listed in Section 6 (green pages) of the catalog.

### CONTINUING EDUCATION FOR NURSES

Continuing Education Units (CEUs) for currently licensed RNs and LVNs can be earned through a variety of Palomar College academic classes. CEU documentation can be awarded by the Community Development office upon successful completion of coursework. For information on CEU options for nurses call (760) 744 1150, ext. 2586.

### GENERAL INFORMATION

The Registered Nursing (RN) program is accredited by the California Board of Registered Nursing and the National League for Nursing Accrediting Commission (NLNAC), 61 Broadway, New York, NY 10006, 1-800-669-1656. The program prepares graduates to give direct nursing care to patients in hospitals and other health agencies on a staff nurse level. The curriculum consists of coursework in nursing, general education, and clinical nursing practice in local hospitals and other health agencies. The nursing faculty of the College is directly responsible for all phases of the program.

Admission to the nursing program is by special application. To be eligible for consideration, applicants must (1) be eligible for admission to Palomar College; (2) attend a Nursing Orientation meeting; (3) submit proof of high school graduation or equivalency or higher; (4) GPA of 2.5 in prerequisite sciences; and (5) meet academic requirements specified in the Nursing Education Department brochure.

**LICENSURE:** Upon successful completion of the Associate Degree Nursing (ADN) Program, students will be eligible to apply to take the National Council Licensure Examination for Registered Nurses (NCLEX RN) and, if performance on the examination is successful, will be licensed as a registered nurse.

Students electing the non degree 30 Unit Option as well as students who do not complete the requirements for the ADN but who successfully complete the required nursing and support courses are eligible to apply to take the National Council Licensure Examination for Registered Nurses (NCLEX RN), as a NON DEGREE candidate, and if successful, will be licensed as an RN by the California Board of Registered Nursing. Endorsement of a non degree RN in other states is questionable. ONCE THE LICENSING EXAM IS TAKEN, STATUS CANNOT BE CHANGED, REGARDLESS OF SUBSEQUENT DEGREES EARNED.

**CREDIT BY EXAMINATION:** Academic credit by examination may be obtained by those whose prior education and/or experience provides the knowledge and skills required to meet the objectives of one or more courses. Students who believe they may be eligible for credit by examination should contact the Nursing Education Department for an appointment for special advising prior to submitting their application for admission to the program. For College policy regarding credit by examination, consult "Credit by Examination" in the Academic Regulations and Standards section of this catalog.

Upon completion of the eligibility requirements, separate theory and clinical performance examinations will be administered for courses with a laboratory component. A written patient care plan is required in all theory and clinical courses. Completion of the written work with a grade of 'C' or better is required prior to taking the clinical examination. Courses without a lab component will have a written examination only. A grade of 'C' or better must be achieved. The Department of Nursing Education's Credit by Examination Policy may be obtained from the Nursing Education Department Office.

A maximum of 20 units may be obtained through credit by examination.

## Associate Degree Nursing (ADN) Curriculum

For students entering the ADN Program Spring 1998 or later

### A. A. DEGREE MAJOR

Program Requirements	Units
MATH 56, 60 or an appropriate score on an approved math exam	0-6
MICR 200* Fundamentals of Microbiology	5
ZOO 200* Anatomy	5
ZOO 203* Physiology	5
<b>Semester I</b>	
NURS 117 Nursing I	9
NURS 103 Nursing Foundation I	2
<b>Semester II</b>	
NURS 118 Nursing II	9
<b>Semester III</b>	
NURS 217 Nursing III	9
NURS 203 Nursing Foundation II	2
<b>Semester IV</b>	
NURS 218 Nursing IV	9
<b>Additional Related Support Courses</b>	
ENG 100** English Composition	4
PSYC Any course numbered 100 or above except 140 & 205	3
SOC Any course numbered 100 or above except 140 & 205	3
SPCH Any course numbered 100 or above except 145 & 150	3
Remaining A.A. Degree Competencies and Courses	
American History and Institutions	6
Health and Physical Education requirement (waived by completing nursing curriculum)	0
Humanities	3
Integrated Self and Life-Long Learning (met by completing nursing curriculum)	0
Multicultural requirement (met by completing NURS 103 & 217)	0
<b>TOTAL UNITS</b>	<b>77 - 83</b>

\* Four semester unit courses accepted from accredited colleges

\*\* Three semester unit courses accepted from accredited colleges Curriculum plan subject to change.

### Advanced Standing for LVNs

Advanced Standing for LVNs is based on the following requirements:

- Hold a valid, active LVN License in the state of California
- Meet all requirements for admission as identified in the College Catalog and the Nursing Education Department brochure
- Successfully complete NURS 110
- Graduation from an accredited LVN/LPN program

Upon successful completion of NURS 110, the student has two academic years to enroll in the nursing program. If the student is unable to enroll within two academic years, for any reason other than lack of space in the program, the student will be required to repeat NURS 110.

## Associate Degree Nursing Curriculum (LVN-RN)

### A. A. DEGREE MAJOR

Program Requirements		Units
MATH 56, 60, or an appropriate score on an approved math exam		0-6
MICR 200*	Fundamentals of Microbiology	5
ZOO 200*	Anatomy	5
ZOO 203*	Physiology	5
NURS 110	LVN RN Transition	2
<b>Semester I</b>		
NURS 217	Nursing III	9
NURS 203	Nursing Foundation II	2
<b>Semester II</b>		
NURS 218	Nursing IV	9
<b>Additional Related Support Courses</b>		
ENG 100**	English Composition	4
PSYC	Any course numbered 100 or above except 140 & 205	3
SOC	Any course numbered 100 or above except 140 & 205	3
SPCH	Any course numbered 100 or above except 145 & 150	3
<b>Remaining A.A. Degree Competencies and Courses</b>		
American History and Institutions		6
Health and Physical Education requirement (waived by completing nursing curriculum)		0
Humanities		3
Integrated Self and Life-Long Learning (met by completing nursing curriculum)		0
Multicultural requirement (met by completing NURS 110 & 217)		0
<b>TOTAL UNITS</b>		<b>59 – 65</b>

When the student has successfully completed the ADN program, the student will be given credit for previous vocational nursing education equivalent to 20 units.

\* Four semester unit courses accepted from accredited colleges  
 \*\* Three semester unit courses accepted from accredited colleges  
 Curriculum plan subject to change.

**CREDIT BY TRANSFER:** Students who have been enrolled in an accredited Registered Nursing program within the last two years may receive full credit for courses transferred which are, as evaluated by the Palomar College Nursing Education Department faculty, comparable to courses offered by the College. If courses transferred are found not to be comparable, students may challenge Palomar courses for credit.

## Associate Degree Nursing Diploma RN to ADN

- The student must present a valid active California RN license to be verified by the Nursing Education Department. A copy of the RN license must be submitted to the College's Records Office for inclusion in the student's academic file.
- The student must have an official transcript of the diploma school coursework sent to Department of Nursing Education at Palomar College.
- Units accepted from diploma school: 38 units of the 40 units required for the major in nursing at Palomar
- College may be accepted from the diploma school of nursing.
- Two units must be earned by completion of, or challenging of, NURS 203, Nursing Foundation II.

- When the student has completed the General Education requirements for the A.A. Degree and the two units required in nursing, the student will be awarded credit for the 38 units of coursework completed in the diploma school of nursing.

## Non Degree Program LVN to RN (30 Unit Option)

Any LVN licensed in the state of California is eligible to apply for this program. The program is prescribed by the Board of Registered Nursing and provides an RN license for CALIFORNIA ONLY. The College acts as a facilitator. Students must successfully complete or challenge NURS 110 to be eligible to apply for this program.

Upon successful completion of NURS 110, a student has two academic years to enroll in the nursing program. If the student is unable to enroll within two academic years, for any reason other than lack of space in the program, the student will be required to repeat NURS 110.

A maximum of 30 units of nursing and support courses are required to fulfill the unit requirement for licensure by the Board of Registered Nursing.

Program Requirements		Units
ZOO 203*	Physiology	5
MICR 200*	Fundamentals of Microbiology	5
NURS 110	LVN RN Transition	2
<b>Semester I</b>		
NURS 217**	Nursing III	9
<b>Semester II</b>		
NURS 218	Nursing IV	9
<b>TOTAL UNITS</b>		<b>30</b>

\* Four semester unit courses accepted from accredited colleges  
 \*\* NURS 203 is recommended with NURS 217

30-Unit Option students, with additional units in general education, may earn the Associate in Arts Degree in General Studies. An Associate Degree in Nursing will NOT be awarded.

### COURSE OFFERINGS

To remain in the program, students must maintain a minimum grade of 'C' in each of the nursing courses and in all required support courses. Grades in the clinical nursing laboratories are based on satisfactory/unsatisfactory practice. A student might fail a nursing course on the basis of clinical practice even though theory grades may be passing.

#### NURS 103 Nursing Foundation I (2)

2 hours lecture

**Prerequisite:** Admission to the Associate Degree Nursing Program

**Corequisite:** NURS 117

**Note:** Graded only

**Transfer acceptability:** CSU

This course provides an introduction to critical thinking as a method of exploring issues related to the nursing role as a provider of care and as a member of the discipline. Concepts essential for nursing practice and functional health patterns are introduced. The nursing process as a foundation for nursing practice is introduced. Multicultural considerations including gender, culture, ethnicity, sexuality, and age are explored. These concepts are introduced at a beginning level for a provider of care and a member of the discipline.

#### NURS 110 LVN-RN Transition (2)

2 hours lecture

**Prerequisite:** Current California Vocational Nurse License

Recommended preparation: MATH 56 or 60, or the appropriate score on an

approved math exam

**Note:** Graded only

**Transfer acceptability:** CSU

This course facilitates the transition of the Licensed Vocational Nurse into the Associate Degree Nursing Program. Provides an introduction to critical thinking as a method of exploring issues related to the nursing role as a provider of care and as a member of the discipline. Emphasis is placed on the acquisition and utilization of the components of the nursing process within a multicultural framework. Multicultural considerations including gender, culture, ethnicity, sexuality, and age, in the care of clients and families are explored. Concepts essential for nursing practice and functional health patterns are introduced.

**NURS 117 Nursing I (9)**

4 hours lecture-15 hours laboratory

**Prerequisite:** Admission to the Associate Degree Nursing Program

**Corequisite:** NURS 103

**Note:** Graded only

**Transfer acceptability:** CSU

The nursing process and components of critical thinking are introduced in this course. Focus is placed on the care of stable clients with expected or predictable outcomes. Provides a basic foundation for nursing practice with a focus on assessment (utilizing functional health patterns), nursing skills, and therapeutic communication. Emphasis is placed on the role of the nurse as a provider of care and member of a discipline.

**NURS 118 Nursing II (9)**

4 hours lecture-15 hours laboratory

**Prerequisite:** NURS 103 and 117

**Note:** Graded only

**Transfer acceptability:** CSU

Builds on the foundation of NURS 117 with the application of the nursing process and critical thinking in the care of the childbearing family, pediatric client, and medical surgical clients. Concepts are expanded to include the recognition of changes in clients with predictable outcomes and the utilization of appropriate interventions. Emphasis is placed on client teaching, collaboration with family members, and shared decision making. There is a continuing emphasis on the role of the nurse as a provider of care and member of the discipline.

**NURS 120 Pharmacology for Nurses I (2)**

2 hours lecture

**Transfer acceptability:** CSU

Basic concepts of pharmacology, pharmacokinetics, pharmacodynamics, drug interactions, and the nursing process related to neurologic and neuromuscular agents; analgesics and anti-inflammatory agents; eye, ear, and skin agents; respiratory agents; endocrine agents; gastrointestinal agents; and reproductive and gender-related agents.

**NURS 121 Pharmacology for Nurses II (2)**

2 hours lecture

**Transfer acceptability:** CSU

Basic concepts of pharmacology, pharmacokinetics, pharmacodynamics, drug interactions, and the nursing process related to anticonvulsive agents; antipsychotic agents; cardiovascular agents; renal agents; anti-infective agents; vaccinations; and antineoplastic agents.

**NURS 140 Adult Health Assessment (1.5)**

3 hours lecture/laboratory

**Transfer acceptability:** CSU

Basic concepts of health assessment to include interviewing and assessment techniques used to obtain a comprehensive health history from an adult and relating findings to the nursing process. Transcultural and adult developmental stage considerations are also included.

**NURS 197 Nursing Topics (.5-4)**

Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture, laboratory, or lecture/laboratory may be scheduled by the department. Refer to Class Schedule

**Note:** May be taken 4 times

**Transfer acceptability:** CSU

Topics in Nursing. See Class Schedule for specific topic offered. Course title will designate subject covered.

**NURS 203 Nursing Foundation II (2)**

2 hours lecture

**Prerequisite:** NURS 103 or NURS 110 or a copy of a current, active California LVN license in good standing must be on file in the Nursing Education Office prior to registration for this class.

**Corequisite:** NURS 217 or NURS 118

**Note:** Graded only

**Transfer acceptability:** CSU

This course builds on the foundation of NURS 103 or NURS 110. Critical thinking is utilized as a method of exploring issues related to the nursing role as a provider of care and member of the discipline. The development of team building concepts to prepare students to function as managers of care will be presented. Historical, political, educational, legal, ethical, and bioethical issues that impact nursing practice are explored. Nursing organizations are explored via the Internet with emphasis on evaluating nursing information. Managerial concepts are introduced and focus on decision-making skills, managing resources, organizing time, delegating and supervising care, teaching staff, and providing feedback. Content is provided on progressive discipline and managing conflict.

**NURS 217 Nursing III (9)**

4 hours lecture-15 hours laboratory

**Prerequisite:** NURS 118 or admission to the Associate Degree Nursing Program (LVN-RN) or admission to the Non-Degree Program LVN-RN (30-unit option)

**Corequisite:** NURS 203

**Note:** Graded only

**Transfer acceptability:** CSU

Builds on the foundation of NURS 118 or 110 as a process for the development of complex thinking. This course has a dual focus. One focus is placed on the care of adult/geriatric clients with multiple and chronic health problems. The other focus is placed on the care of adolescent, adult, and/or geriatric clients with psychiatric mental-health problems. Concepts are expanded to include identification, prioritization, and interventions for clients who have unpredictable outcomes or who demonstrate changes in health status. Collaboration with other health team members when modifying client's care is incorporated. The role of the nurse expands to include being a manager of a group of clients.

**NURS 218 Nursing IV (9)**

3½ hours lecture-16½ hours laboratory

**Prerequisite:** NURS 203 and 217

**Note:** Graded only

**Transfer acceptability:** CSU

Builds on the foundation of NURS 217 and 203 expanding nursing practice and critical thinking to incorporate complex decision making. Focus is placed on adapting and managing care for multiple clients with complex and rapidly changing health care needs. During the preceptorship, the student functions as a provider of care, manager of care, and a member of the discipline.

**NURS 295 Directed Study in Nursing (1,2,3)**

3, 6, or 9 hours laboratory

**Prerequisite:** Approval of proposal by the department chairperson

**Note:** Credit/No Credit grading only; may be taken 4 times for a maximum of 6 units

**Transfer acceptability:** CSU

Designed for the student who has demonstrated a proficiency in nursing subjects and the initiative to work independently on a particular sustained project which does not fit into the context of regularly scheduled classes. Additionally, this course can be used for students transferring into the Palomar College nursing program. Course work would fulfill needed content and/or clinical laboratory time to meet the requirements of the Associate Degree Nursing Program.

## Nutrition

See Family and Consumer Sciences, Health, Institutional Food Service Training