

2005 - 2006 CATALOG

Palomar Community College District
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San Marcos, California 92069-1487
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<http://www.palomar.edu>

Vol. LIV

Palomar College is accredited by the Accrediting Commission for Community and Junior Colleges of the Western Association of Schools and Colleges, (10 Commercial Boulevard, Suite 204, Novato, CA 94949 (415) 506-0234), an institutional accrediting body recognized by the Council for Higher Education Accreditation and the U.S. Department of Education. Full credit is given by the University of California, the California State Universities, and other major colleges and universities. Palomar College is also officially accredited by the American Dental Association, the Board of Registered Nursing, and the National League for Nursing.

Palomar College holds membership in the Community College League of California (CCLC), the American Council on Education (ACE), and the American Association of Community Colleges (AACC). The College is approved for training of veterans and service members and is authorized under federal law to enroll nonimmigrant alien students. Accreditation information is available in the office of the Superintendent/ President.

Palomar College endeavors to present itself and its programs to the public accurately and fairly. To this end, the College subscribes to a policy of truth in advertising. Those responsible for the preparation of this catalog, the class schedule, and all other announcements for public consumption make every effort to assure that the information presented is correct and up to date. However, the College reserves the right to add, amend, or repeal any rules, regulations, policies, and procedures. The College assumes no responsibility for program changes and/or publication errors beyond its control.

Requirements and courses in this catalog are effective with the Fall 2005 semester.

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College Calendar 2005-2006

Summer Session 2005

4 week classes begin May 23 end	June 18
Residence determination date	June 19
6 and 8 week classes begin.....	June 20
Last day to apply for an AA degree, Certificate of Achievement, or Certificate of Proficiency	June 30
Independence Day.....	July 4
6 week TTH classes end	July 28
6 week MW classes end.....	August 1
6 week MTWTH classes end	August 1
8 week TTH classes end	August 11
8 week MW night classes end.....	August 15
8 week MTWTH classes end	August 15

Fall Semester 2005

First day applications accepted	January 3
Registration begins.....	July 12
Faculty Convocation day.....	August 19
Residence determination date	August 21
Classes begin.....	August 22
Labor Day	September 5
Last day to drop full semester-length classes with no grade placed on permanent record	September 20
Last day to apply for an AA degree, Certificate of Achievement, or Certificate of Proficiency	September 30
Last day to drop full semester-length classes with 'W'	October 15
Veterans' Day	November 11
Thanksgiving Holidays.....	November 24-27
Final examinations begin	December 12
Fall semester ends	December 17
Semester break/Professional development	December 18 - January 16

Spring Semester 2006

First day applications accepted	October 2
Registration begins.....	November 28
Martin Luther King, Jr. Day	January 16
Residence determination date	January 16
Classes begin.....	January 17
Last day to drop full semester-length classes with no grade placed on permanent record	February 15
Lincoln's Day	February 17
Washington's Day.....	February 20
Last day to apply for an AA degree, Certificate of Achievement, or Certificate of Proficiency	February 28
Last day to drop full semester-length classes with 'W'	March 10
Spring recess.....	March 20-26
Final examinations begin	May 13
Spring semester ends	May 19
Evening commencement	May 19
Memorial Day	May 29

Summer Session 2006 (Tentative)

4 week classes begin May 22 end	June 17
Residence determination date	June 18
6 and 8 week classes begin.....	June 19
Last day to apply for an AA degree, Certificate of Achievement, or Certificate of Proficiency	June 30
Independence Day.....	July 4
6 week TTH classes end	July 27
6 week MW classes end.....	July 31
6 week MTWTH classes end	July 31
8 week TTH classes end	August 10
8 week MW night classes end.....	August 14
8 week MTWTH classes end	August 14

District Governing Board

Nancy C. Chadwick, M.S.W., M.P.A.
 Mark R. Evilsizer, M.A.
 Ruth Larson, M.D.
 Darrell L. McMullen, M.B.A.
 Michele T. Nelson, Ph.D.
 A.S.G. President

College Organization

SUPERINTENDENT/PRESIDENT

Robert P. Deegan.....Ext. 2106
Superintendent/President

Foundation
Deborah Stanley, Executive Director.....Ext. 2732

Institutional Research and Planning
Michelle Barton, DirectorExt. 2360

INSTRUCTIONAL SERVICES

Berta CuaronExt. 2246
Assistant Superintendent/Vice President

Office of Instructional Services
Diane Veach, ManagerExt. 2248

Arts, Media, Business, and Computing Systems

Patrick Schwerdtfeger, DeanExt. 2154

Art Department
Jay Schultz, Co-ChairpersonExt. 2302
Michael Steirnagle, Co-ChairpersonExt. 2302

Business Education Department
David Forsyth, ChairpersonExt. 2489

Communications Department
Wendy Nelson, Chairperson.....Ext. 2440

Computer Science and Information Systems Department
Terrie Canon, ChairpersonExt. 2387

Graphic Communications Department
Gracie FowlerExt. 2452

Performing Arts Department
Michael Mufson, ChairpersonExt. 2316

Career, Technical, and Extended Education

Wilma Owens, Dean.....Ext. 2276

Cooperative Education Department
Bruce McDonough, ChairpersonExt. 2354

Design and Consumer Education Department
Nancy Galli, Chairperson.....Ext. 2349

Emergency Medical Education
Debi Workman, DirectorExt. 8150

Occupational and Noncredit Programs
Mollie Smith, DirectorExt. 2284

Public Safety Programs
Tom Plotts, DirectorExt. 1722

Regional Occupational Programs
Judy Fish, Director.....Ext. 2301

Trade and Industry Department
Joseph Schaeffer, ChairpersonExt. 2545

Workforce and Community Development
Teri Safranek, DirectorExt. 2826

Palomar College Locations

Extended Education
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Borrego Springs, Mt. Carmel, Poway, and Ramona Sites
Tom Medel, Manager(858) 484-3890

Camp Pendleton, Fallbrook, and Pauma Sites
Janet Hoffman, Manager.....(760) 385-0498

Escondido Center
Theo Brockett, ManagerExt. 8103

Languages and Literature

Katheryn Garlow, DeanExt. 2251

English Department
Bruce Orton, ChairpersonExt. 2392

English as a Second Language Department
Marty Furch, ChairpersonExt. 2261

Foreign Languages Department
Carlos Gomez, Chairperson.....Ext. 2390

Reading Services
Stan Levy, DirectorExt. 2568

Speech Communication/Forensics/ASL Department
Dr. Patrick Mills, ChairpersonExt. 2405

Mathematics and the Natural and Health Sciences

Sara Thompson, DeanExt. 2253

Chemistry Department
David Boyajian, Chairperson.....Ext. 2505

Dental Assisting Program
Denise Rudy, DirectorExt. 2571

Earth Sciences Department
Al Trujillo, Chairperson.....Ext. 2512

Life Sciences Department
Ralph Ferges, Chairperson.....Ext. 2275

Mathematics Department
Jay Wiestling, ChairpersonExt. 2535

Nursing Education Department
Judy Eckhart, Chairperson.....Ext. 2580

Physics and Engineering Department
Takashi Nakajima, ChairpersonExt. 2505

Social and Behavioral Sciences**Dr. Mark Vernoy, Dean Ext. 2759**

American Indian Studies Department

Patricia Dixon, Chairperson Ext. 2425

Behavioral Sciences Department

Katie Townsend-Merino, Chairperson Ext. 2329

Child Development Department

Diane Studinka, Chairperson Ext. 2206

Children's Center

Pamela Keinath, Director Ext. 2578

Economics, History, and Political Science Department

Jose Esteban, Chairperson Ext. 2412

Library Technology

Judy Cater, Chairperson Ext. 2618

Multicultural Studies Department

John Valdez, Director Ext. 2206

Physical Education Department

Robert Vetter, Chairperson Ext. 2459

Tutoring Services Program

Ruth Barnaba, Coordinator Ext. 2238**STUDENT SERVICES****Joseph L. Madrigal Ext. 2158****Assistant Superintendent/Vice President****Athletics****John Woods, Director Ext. 2460****Counseling Services****Lynda Halttunen, Dean Ext. 2184**

Articulation Services

Gloria Kerkhoff, Articulation Officer Ext. 2528

Career Center

Renee Roth, Director Ext. 2194

Counseling Center

Jose Fernandez, Chairperson Ext. 2680

Disability Resource Center

Ron Haines, Director Ext. 2375

Extended Opportunity Programs and Services

Anne Stadler, Director Ext. 2312

Grant Funded Programs

Calvin One Deer Gavin, Director (760) 290-2525

Transfer Center

Theresa Hogan-Egkan, Director Ext. 2552**Enrollment Services****Herman Lee, Director Ext. 2171**

Admissions and Enrollment

Ralph Baker, Supervisor Ext. 2164**Jamie Moss, Supervisor, Escondido Ext. 8134**

Evaluations and Records

Linda Cox, Supervisor Ext. 2165

Financial Aid and Scholarships

Mary San Agustin, Director Ext. 2367

International Education

Yasue O'Neill, Coordinator Ext. 2167

Veterans' Services

Judy Duncan, Supervisor Ext. 2173**Health Services****Jayne Conway, Director Ext. 2380****Student Affairs****Bruce Bishop, Director Ext. 2595****FINANCE AND ADMINISTRATIVE SERVICES****Assistant Superintendent/****Vice President Ext. 2109**

Business Services

Kenneth Jay, Director Ext. 2122

Campus Police

Anthony Cruz, Interim Chief of Police Ext. 2289

Facilities

Mike Ellis, Director Ext. 2655

Fiscal Services

Director Ext. 2119

Information Services

Don Sullins, Consultant Ext. 2140

Payroll Services

Espy Flores, Manager Ext. 2217**HUMAN RESOURCE SERVICES****Assistant Superintendent/****Vice President Ext. 2531**

Human Resource Services

Nancy Horio, Manager Ext. 2202

Palomar College Locations

Palomar's Escondido Center and seven sites offer many of the same quality credit and noncredit classes and Community Development seminars that are available on the San Marcos campus. Committed to serving its entire district, the college literally takes learning to its communities via the Escondido Center and the seven sites.

At the Center and sites, students may take courses leading to an associate degree or certificate, or they may complete transfer requirements for further study at a four-year institution. Many students also enroll in courses or seminars to upgrade career skills or to continue their lifelong journey of learning.

Palomar College at Borrego Springs

(760) 767-4525

**Location: Upstairs, Borrego Springs Mall
585 Palm Canyon Dr.
P.O. Box 2474
Borrego Springs, CA 92004**

Palomar College at Borrego Springs is open Tuesday, Wednesday and Thursday, 10:00 a.m. to 2:00 p.m.

Course Offerings: General education classes required for an associate degree and/or transfer, and non-credit classes.

Support Services: Admission and enrollment services.

Palomar College at Camp Pendleton

(760) 725-6626

**Location: Building 1331
Camp Pendleton, CA 92055**

Palomar College at Camp Pendleton Center is open Monday through Thursday, 8:00 a.m. to 6:30 p.m. and Friday, 8:00 a.m. to 2:00 p.m.

Course Offerings: Programs are available in Administration of Justice/Law Enforcement, Business Management, General Business, General Studies, and Liberal Arts and Sciences.

Support Services: Admission and enrollment services, counseling and bookstore.

Palomar College Escondido Center

(760) 744-1150, ext. 8100

**1951 East Valley Parkway
Escondido, CA 92027**

Palomar College Escondido Center Admissions Office is open Monday through Thursday, 7:30 a.m. to 7:00 p.m., and Friday, 7:30 a.m. to 4:00 p.m. Parking permits are required at the Escondido Center.

Course Offerings: General education classes required for an associate degree and/or transfer, non-credit classes, and Community Development fee-based seminars. Vocational programs include Emergency Medical Education, Medical Assisting, and Wastewater/Water Technology. ESL credit and non-credit classes are offered.

Support Services: Admission and enrollment services, counseling and assessment, tutoring, health services, food services, bookstore, and library with internet access. The Center also has a basic skills computer laboratory.

Palomar College at Fallbrook

(760) 723-1058

**Location: Fallbrook High School
2400 S. Stage Coach Lane, Rm. 117
Fallbrook, CA 92028**

Palomar College at Fallbrook is open Monday through Thursday, 5:00 p.m. to 9:00 p.m. There is no smoking on campus.

Course Offerings: General education classes required for an associate degree and/or transfer, and non-credit classes. ESL credit and non-credit classes are offered.

Support Services: Admission and enrollment services, counseling and bookstore.

Palomar College at Mt. Carmel

(858) 484-3890

**Location: Mt. Carmel High School
9550 Carmel Mountain Road
San Diego, CA 92129**

(R-1 portable building, opposite the administration building and flagpole)

Palomar College at Mt. Carmel is open 2:00 p.m. to 9:30 p.m., Monday through Thursday. There is no smoking on campus.

Course Offerings: General education classes required for an associate degree and/or transfer, non-credit classes, and Community Development fee-based seminars.

Support Services: Admission and enrollment services, counseling and assessment, bookstore, and food services.

Palomar College at Pauma

(760) 742-1121

**1010 Pauma Reservation Road
Pauma Valley, CA 92061**

Palomar College at Pauma is open 2:00 p.m. to 7:00 p.m., Monday through Thursday.

Course Offerings: General education classes required for an associate degree and/or transfer. The site has a basic skills computer laboratory.

Support Services: Admission and enrollment services, counseling and assessment, tutoring and an on-site library.

Palomar College at Poway**(858) 679-6613****Location: Poway High School****15500 Espola Way****Poway, CA 92064**

Palomar College at Poway is located at the rear of the Poway High School campus on Titan Way, behind the performing arts center. The office is open Monday through Thursday, from 5:00 p.m. to 9:00 p.m. There is no smoking on campus.

Course Offerings: General education classes required for an associate degree and/or transfer, non-credit classes, and Community Development fee-based seminars.

Support Services: Admission and enrollment services, counseling and assessment, and job placement information.

Palomar College at Ramona**(760) 788-1371****Location: Ramona High School****1401 Hanson Lane****Ramona, CA 92065**

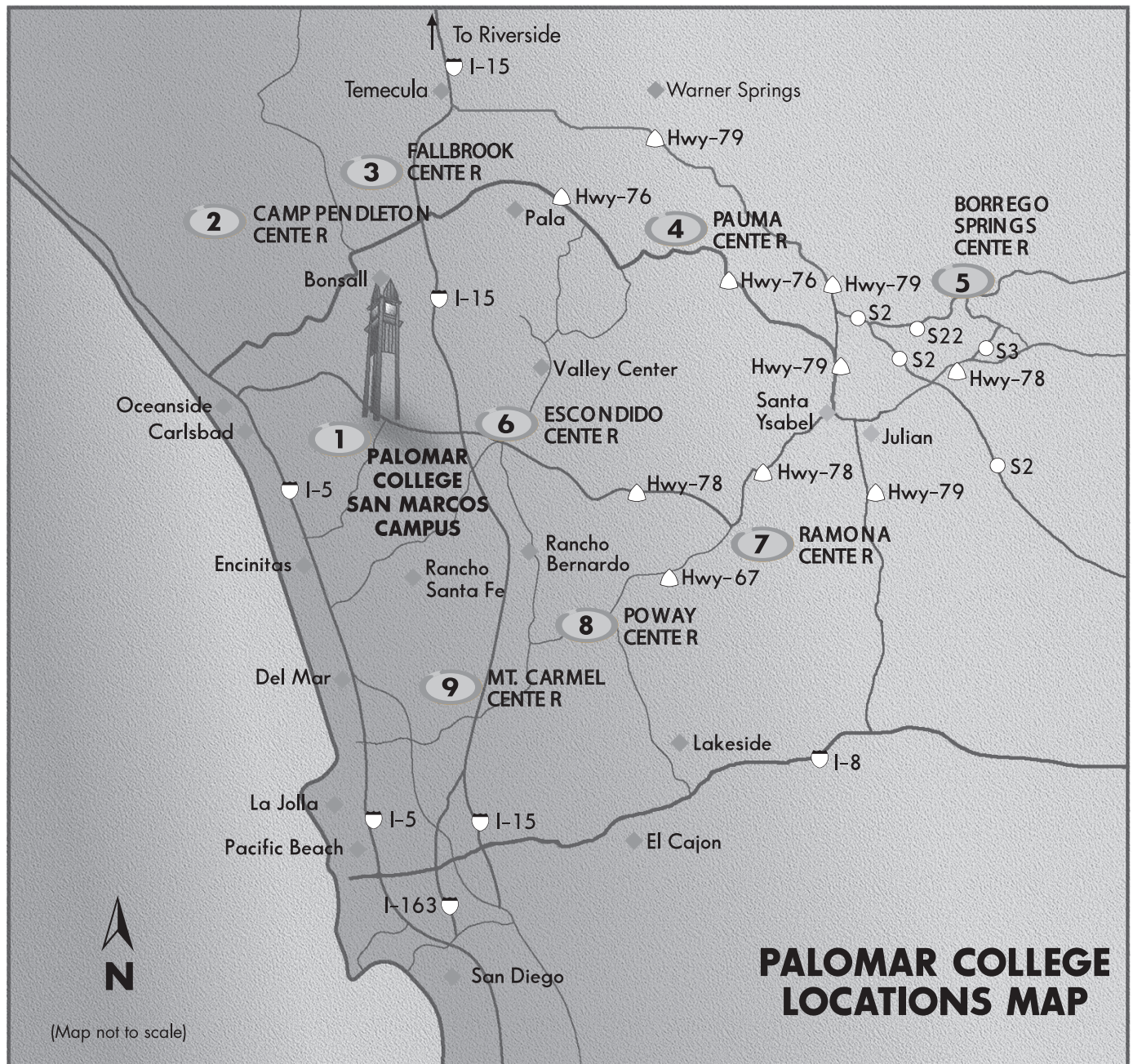
The Ramona Center is open Monday through Thursday, 5:00 p.m. to 9:00 p.m. There is no smoking on campus.

Course Offerings: General education classes required for an associate degree and/or transfer and non-credit classes. ESL credit and non-credit classes are offered.

Support Services: Admission and enrollment services, and counseling and assessment.



LOCATION OF SAN MARCOS CAMPUS AND PALOMAR COLLEGE CENTERS



GENERAL INFORMATION



Section 1 - General Information

History of the College

The history of Palomar College is rich in tradition, educational achievements, and personalities. In 1946, Dr. Daniel C. McNaughton, the first president of the college, said, "Palomar College will provide the first two years of regular four-year college course work in order to meet the requirements of students whose ambitions include university training. It will also provide a two-year liberal arts education, leading to the Associate in Arts degree for students who wish to secure a broad cultural education, but who do not necessarily plan to attend a four-year college or university. It will offer a wide variety of training programs in many of the semi-professional and vocational fields represented in the industrial, mercantile, and agricultural life in San Diego County." The history has been documented in a 636-page book, **Palomar College Golden Jubilee: 50 Years of Excellence**, published in 1995. Copies of the book are available in the Palomar College Bookstore.

On January 15, 1946, registered voters in the Vista Unified School District, the Fallbrook Union School District, and the Escondido Union High School District voted 714 to 417 in favor of establishing a "junior college" in the North San Diego County area. At that time there were only 4,525 registered voters in the three school districts, and 1,131 of these individuals cast ballots on January 15. In those days, the Escondido District included the geographical areas which are now contained in the San Marcos and Poway Unified School Districts.

Under state law, the San Diego County Superintendent of Schools appointed five persons as members of the first governing board for the new college. Their first meeting was held February 27, 1946. At subsequent meetings that year, the board selected a name for the college and agreed that classes would begin September 23, 1946, on what then was the Vista High School campus, between the hours of 3:30 and 10:00 p.m. That site is now occupied by Lincoln Middle School in Vista.

The name "Palomar" was chosen because the college was located fairly close to Palomar Mountain, where the California Institute of Technology was completing construction of what was to be the world's largest telescope. Most of California's two-year colleges, including Palomar, are now called "community colleges," rather than "junior colleges."

The governing board hired a director, a dean of students, and nine faculty members--seven men and two women--to teach courses in science, mathematics, music, art, social sciences, commerce, English, physical education, and foreign languages at the new college. Exactly 100 persons were enrolled on the first day of classes, and three days later, the total had climbed to 198--108 men and 90 women. This total did not include carpentry apprentices or agricultural students in the Veterans' Vocational Agricultural course that started two weeks later. Over the next 55 years, college enrollment grew steadily until it exceeded 27,000 full-time and part-time students in 2000-2001. During the summer of 1949, after three years of operation at Vista High School, the college moved to its present 200-acre campus in San Marcos. As the North San Diego County population continued to grow, more and more classes were scheduled in other locations. Those locations with the largest numbers of classes and students were called "education centers," and include: Escondido, Fallbrook, Ramona, Poway, Mt. Carmel,

Camp Pendleton, Pauma Indian Reservation, and Borrego Springs.

Fifty-nine years later, in 2005, Dr. McNaughton's general description is still true.

Vision

Learning for Success

Mission

Palomar College is an educational leader committed to quality learning. We provide our community the knowledge, information, skills, and aesthetic appreciation necessary to live responsibly, effectively, and creatively in an interdependent and changing world.

Values

Palomar College is a learning community dedicated to achieving student success and cultivating a love of learning. We strive to improve performance and outcomes based on evidence. To provide the highest quality learning and cultural experiences, we are guided by our core values of

- Achieving excellence in teaching, learning, and service;
- Fostering integrity as the foundation for all we do;
- Providing access to our programs and services;
- Celebrating diversity in people, philosophies, cultures, beliefs, programs, and learning environments;
- Supporting inclusiveness of individual and community viewpoints in collaborative decision-making processes;
- Promoting mutual respect and trust through open communication and actions;
- Supporting innovation to enhance and enrich learning environments and services.

Educational Philosophy

The educational philosophy of Palomar College is based upon belief in the value of the individual and belief in the individual's potential for intellectual, ethical, personal, and social growth. Only through growth in these areas can a citizen come to understand personal rights.

The fundamental assumption of the democratic way of life is the intrinsic worth of the individual. This assumption thus becomes the main principle of public education.

In order to become an effective member of a democratic society, an individual should participate in a free exchange of ideas. Only within a democracy is the individual assured the freedom for such an exchange and for self-realization consistent with the freedoms and opportunities of others.

By providing equal opportunities for all, the community college helps its students to realize their potential. Thus their talents become more readily available to the community, and their participation in society becomes more effective.

Governing Board and District Policy

In accordance with its designated function as a policy-making body, the Governing Board of the Palomar Community College District creates the policies by which the district operates, subject to the Education Code of the State of California, all rules prescribed by the Board of Governors of the California Community Colleges, and all federal statutes. Board policy may be changed, subject to the Education Code of the State of California, only by action of the Governing Board through a majority vote of its members.

The Governing Board schedules its regular open meetings in the Board Room on campus at 6:00 p.m. on the 2nd Tuesday of the month. Meetings are open to the public.

Palomar College Foundation

Since the 1950s, the Palomar College Foundation has helped provide supplement public funding for college programs and activities. Over the years, the Foundation has provided funding for the swimming pool, a harpsichord for the Performing Arts Department, a trailer for tutorial groups, facilities for the Child Development Center, furniture for the Student Center, renovation for the Library, curtains for the Theater, and many, many scholarships for deserving students.

With the support and generosity of the community, the Palomar College Foundation has secured over \$15 million in designated and undesignated funds which are support student learning, educational programs, scholarships and capital equipment. Yet, every year as state budgets shrink, the needs of our community grow.

Won't you consider making a contribution? We welcome the support of individuals, families, and businesses who want to help fulfill the mission of Palomar College, the vision of our community and the hopes of thousands of students and families who need our help. For more information or to be added to our newsletter mailing list, please call the Advancement Office, (760) 744-1150, ext. 2733.

Policy On Diversity

Palomar College recognizes and appreciates the benefits of a diverse campus community and values the individual distinctions of its staff and students. In support of its goal to encourage students to examine their own and other heritages through multicultural and interdisciplinary programs, Palomar College seeks to provide positive role models for all students and recognizes that diversity in the academic and vocational environment fosters cultural awareness, mutual understanding and respect, harmony and creativity.

Palomar College offers equal educational and employment opportunities regardless of group identification, national origin, religion, age, sex, race, color, ancestry, sexual orientation, or physical or mental disability. It is the policy of the College that, unless exempted by statute, every course offered and maintained by the District shall be fully open to enrollment and participation by any person who has been admitted to the College and who meets the stated prerequisites for the course.

The District's policy of non-discrimination covers admission, outreach, educational programs and activities, facilities, access to course offerings, counseling, financial assistance, employment assistance to students, health and insurance benefits and services, athletics, textbooks and curricular material, and employment.

Limited English speaking students who are otherwise eligible will not be excluded from any vocational education program.

Spanish Translation

Los estudiantes elegibles para entrar en el programa de educacion vocacional no pueden ser excluidos debido a su ingles limitado.

Vietnamese Translation

Nhung hoc-sinh neu hoi du cac dieu-kien phu-hop vao nhung chuong-trinh giao-duc huan-nghe se khong bi tu khuoc boi ly do trinh-do Anh-van kem.

Designation of Responsible Employee as Title IX Coordinator

The Assistant Superintendent/Vice President, Human Resource Services, Administrative Services Building, Room A-1, (760) 744-1150, ext. 2531.

ADMISSION AND REGISTRATION

2



Section 2 - Admission and Enrollment

Admissions Policy

Any person who meets one of the following requirements is eligible to attend Palomar College:

- Has graduated from an accredited high school
- Is a non-high school graduate 18 years of age or older
- Has passed the California High School Proficiency Examination (CHSPE), or Certificate of Equivalency (G.E.D.)
- Is a minor who may profit from instruction and has permission of the local high school district
- Has petitioned for special admission and obtained approval from parent/guardian, representative of the school district of residence and Palomar College Director of Enrollment Services (admitted on a permission and space available basis).

Application for Admission

Anyone who wishes to attend Palomar College must submit a completed application for admission. Students may apply online at <http://www.palomar.edu>.

Admission to Special Programs

Admission to the Dental Assisting Program and the Nursing Program is by special application. For information contact the Health Programs Coordinator, Room NO-2, ext. 2279.

Special Admission for Accelerated Students

To be considered for admission, minors must have completed the eighth grade or reached the age of 15, and have permission of the local school district. Home-schooled minors may enroll with permission of the local school district. Minors, under 15 years of age, with permission from a public or private school, and the Palomar College instructor, may enroll only in courses specified by the local school district or private school. Otherwise, minors under 15 years of age are limited to enrolling in special classes devoted to children, such as child development lab classes or youth orchestra. Credit earned is college credit and may also be used as high school credit with consent of the high school. See the Admissions Office for details.

Residency

Information in the following paragraphs summarizes the rules and regulations related to student residency for educational purposes. Details are found in Education Code Section 68090, Title 3, Part 41, Chapter 1, and may be found in the college library.

Residency is determined when a student applies for admission to the College. The Admissions Office will help with questions and interpretation of the regulations.

Definition of Residence

In law, every person has a residence. There can be one and only one residence. A residence cannot be lost until another is gained. It is the place where one lives when not on vacation or leave. It can be changed only by a combination of act and intent.

Every person who is married or is 18 or older and under no legal restriction may establish a residence. Certain minors may also establish residence.

Residency Status

A California "resident" is a person who has resided in the state for more than one year prior to the residence determination date and shows "intent" to the state of California.

A "nonresident" is a person who has not resided in California for the full one-year period before the residence determination date. A nonresident must pay nonresident tuition in addition to other fees for credit classes. Tuition must be paid in full at registration.

Residence Determination Date

The residence determination date is that day immediately preceding the first day of instruction.

Factors Considered to Determine Residency

The following factors are called "indices of intent." They, along with a person's presence in California, are considered in determining California residency. No one factor decides residency. All evidence is weighed. If any one of the "indices of intent" show intent only for another state during the one-year period, it may show lack of intent for California:

- Own residential property in California for personal use
- Are licensed to practice a profession in California
- Vote in California
- Pay California State Income Taxes
- Possess a California driver's license and a vehicle registered in California
- Have an active checking and/or savings account in a California bank
- Show a California address on military records
- Possess a marriage license or a divorce decree issued in California
- Have been paying nonresident tuition in another state

Exception to Residency Requirements

There are exceptions to the residency rules. They may include the following:

- Active duty military personnel stationed in California
- Dependents of active duty military personnel stationed in California
- Certain minors who stayed in California when parents moved
- Self-supporting minors
- Full-time employees of Palomar College or a child or spouse of the full-time employee
- Those who attended a California high school for 3 or more years AND graduated from a California high school or attained an equivalent (GED or CHSPE). This exception does not grant California residency or eligibility for any state financial aid.

Contact the Admissions Office for more details.

International Students (F-1 and M-1 Visas)

Palomar College is authorized under federal law to enroll nonimmigrant alien students. The following is required for admission to the regular college program:

- International student application with passport-size photograph
- A \$25.00 non-refundable Application Fee (Cashier's check only made payable to Palomar College)
- Confidential financial statement certified by bank official
- Test of English as a Foreign Language (TOEFL) score of 470 (PBT)/150 (CBT) or more
- High School graduate (official transcripts of all secondary and college work must be provided with certified English translation)

- Satisfactory report if attending a language school or another college in U.S.A.
- Letter of reference
- Doctor's health certification (TB skin test)

Application Deadlines:

For Fall 2005/Overseas applicants May 1, 2005
 Applicants within the USA.....June 30, 2005
 For Spring 2006/Overseas applicants Oct. 15, 2005
 Applicants within the USA.....Nov. 30, 2005
 For Fall 2006/Overseas applicants May 1, 2006
 Applicants within the USA.....June 30, 2006

International students are required to pay nonresident tuition. For informational brochure and/or application forms, contact:

Office of International Education
 Palomar Community College
 1140 W. Mission Road
 San Marcos, California 92069-1487 USA
 (760) 744-1150, Ext. 2167
 FAX (760) 761-3592
<http://www.palomar.edu>
intladm@palomar.edu

International students who do not meet the requirements for regular college admission may attend the intensive English language program. For an informational brochure and/or application forms, contact:

California English School
 Palomar Community College
 1140 West Mission Road
 San Marcos, California 92069-1487 USA
 (760) 591-4930
 FAX (760) 591-4932
ces@palomar.edu

Matriculation Rights and Responsibilities

Matriculation is a process that assists you in choosing, planning, and achieving your educational and career goals. It is Palomar's way of supporting your right to succeed in college. Matriculation is a partnership between you and Palomar College.

Palomar College agrees to:

- Evaluate your English, math, and reading skills
- Help you register for appropriate classes
- Provide you with an orientation, and information on services available, and possible majors and/or careers
- Provide access to counselors and instruction

You agree to:

- Decide upon your major and goal
- Attend an orientation and assessment session
- Work with us to develop an educational plan by the time you have completed 15 units
- Attend and complete courses to make the best use of the time you spend at Palomar

The college may suspend or terminate services to any student who fails to fulfill his/her responsibilities. However, the college may never suspend or terminate any service for which a student is otherwise entitled under any other provision of law. In addition, students may challenge any matriculation requirement or regulation using the petition process.

Prior to registration, all non-exempt students must complete the following steps that apply:

- Submit an application for admission
- Send in all transcripts or previous assessment scores for consideration
- Sign up for, and attend, an assessment and orientation session at the Assessment Center, SU-1, or at the Escondido Center.

New, returning, or transfer students who may be exempted from the matriculation process are students who:

- Already have an associate's or bachelor's degree
- Are attending Palomar for personal enrichment
- Are enrolled only in non-credit community education courses
- Are taking classes only to upgrade job skills
- Are enrolled in apprenticeship or other special vocational education programs
- Are concurrently enrolled in another college or university

Exempt students are not required to participate in the matriculation process, but are encouraged to see a counselor at any time.

Assessment, Advisement and Orientation

What is Assessment?

Assessment is the process the college uses to evaluate your skills in areas such as:

- Reading
- Writing
- Math
- English as a Second Language (ESL)

Assessment (the placement test plus multiple measures), advisement, and orientation are given several times throughout the year for the convenience of new, continuing, returning, and transfer students.

Assessment gives students knowledge of present levels of skills in math, English, and reading. Assessment, along with advisement and orientation, using ASSET or COMPASS, takes approximately 3-1/2 hours, and includes receiving the results.

All students must submit an application for admission before making an appointment for the placement test. Students must contact the Student Access/Assessment Center for a reservation ticket. Reservation tickets are issued on a first-come, first-served basis. Seating is limited. Students may also schedule an appointment by e-mail to Assessment@palomar.edu. Students should find the location prior to their appointment since no one will be admitted after the assessment has begun. All three subjects (English, math and reading) will be covered. Students are permitted to be assessed only once per year. Placement is valid for two years.

In addition to taking Palomar's placement test, the following options are also available to students:

1. Students may submit documentation of previous college course work and/or assessment scores from another college. Scores expire after two years; course work does not expire.
2. Non-native English speakers may take a specialized placement exam. Contact the ESL Department.
3. Special testing conditions are offered for disabled students through the D.S.P. & S. Department.

4. Students may place themselves in entry-level classes and progress through the curriculum without taking the assessment.

The decision to challenge assessment placement will be made on an individual basis. Please contact the Assessment Office located in the Student Access/Assessment Center, SU-1.

What is Orientation?

Orientation is a process that provides students with information about the College's programs, services, academic expectations, procedures, advising and registration. Orientation follows all areas of assessment. Assessment results will be distributed at the conclusion of the orientation. Students will:

- Receive information about college requirements
- Learn about the requirements for Certificates, Associate and Bachelor's degrees, specific major requirements and general information
- Receive information about assessment recommendations and basic skill levels
- Available immediately after scheduled assessment online

When do I need Assessment, Advisement and Orientation?

New students must complete assessment, advisement and orientation before qualifying to register for classes. Students who meet this requirement before the registration period for the next semester will receive an earlier registration appointment.

There are several other options for completing assessment, advisement, and orientation. These include special sessions for:

- Students with disabilities
- English as a Second Language students
- EOPS students
- International students

Contact the Student Access/Assessment Center, see the current class schedule, or visit the Website, <http://www.palomar.edu/counseling/ASSM.html>.

What is Educational Planning?

Educational Planning is the process of mapping your courses semester by semester. A counselor will assist you in choosing the appropriate course sequence that best fits your educational goal.

English, math, reading, and study skills are the foundation for success in other college level courses.

Complaints

If you feel that assessment, orientation, counseling, or any other matriculation procedure is being applied in a discriminatory manner, you may file a complaint.

Enrollment Conditions

Many courses and education programs of study have enrollment conditions such as prerequisites, corequisites, or advisories on recommended preparation. These faculty-approved conditions are considered necessary and appropriate to ensure that you are adequately prepared to succeed in the course or educational program.

Enrollment restrictions are defined below. It is your responsibility to meet any and all enrollment conditions.

What is a Prerequisite?

A prerequisite is a condition of enrollment that you are required to meet in order to demonstrate current readiness in a course or educational program. You may be required to show proof of meeting the prerequisite. Failure to meet the stated prerequisite may result in you being administratively dropped from the course.

What is a Corequisite?

A corequisite is a condition of enrollment consisting of a course that you are required to simultaneously take in order to enroll in another course. Failure to enroll in the stated corequisite will result in you being administratively dropped from the course.

What is an Advisory on Recommended Preparation?

Recommended preparation is a condition of enrollment that you are advised, but not required, to meet before or in conjunction with enrollment in a course or educational program. If you believe that you have satisfied the advisory by means other than the stated advisory, you are urged to consult with the appropriate department to determine your readiness to enroll in the course or educational program.

Are there other limitations on enrollment?

Yes. Enrollment in certain courses or educational programs of study may require try-outs, auditions, or may be limited by health and safety considerations, facility limitations, faculty workload, the availability of qualified instructors, funding limitations, or legal requirements imposed by statutes, regulations or contracts. All such limitations are in conformity with the provisions of Title 5, Section 58106, California Community College Board of Governors.

What if I don't have the necessary prerequisites or corequisites?

You may not be permitted to enroll in a class for which you cannot demonstrate you have met the prerequisite, or are enrolled in the corequisite. If it is determined after a course begins that you have not met the prerequisite, you may be dropped from the course.

What if I am currently enrolled in the prerequisite when it is time to register for my class? Will I be prevented from enrolling in the next level course?

No. If you are currently enrolled in the prerequisite course at Palomar College, and it is assumed that you will pass the course with a 'C' or better, you will be permitted to enroll in the next level course. If you do not successfully pass the course (D, F, FW, NC, Inc, or W), you will be dropped from the class before the opening day.

Can I challenge a prerequisite or corequisite?

Yes, under certain conditions. Refer to the information on challenges below.

Challenging Prerequisites

You have the right to challenge any prerequisite. A prerequisite or corequisite challenge requires written documentation, explanation of alternative course work, background, abilities, or other evidence which has adequately prepared you for the target course. A Prerequisite or Corequisite Challenge Petition can be obtained from the Admissions & Records Office, the Counseling Center, or an Education Center or Site. Reasons

for seeking a Prerequisite and Corequisite Challenge Petition may include one or more of the following:

1. A prerequisite or corequisite has not been made reasonably available.
2. A prerequisite or corequisite has not been established in accordance with the district's process for establishing prerequisites and corequisites.
3. You can provide evidence of having the knowledge or ability needed to succeed in the course despite not meeting the prerequisite or corequisite.
4. You may challenge other limitations on enrollment.
5. You may challenge a prerequisite or corequisite established to protect the health and safety of himself, herself, and/or others.
6. A prerequisite, corequisite, or limitation on enrollment is discriminatory or applied in a discriminatory manner.
7. A prerequisite or corequisite is in violation of Title 5.

If space is available in the target course when you file a challenge to the prerequisite or corequisite, the College shall reserve a seat for you and resolve the challenge within five working days. If the challenge is upheld or the College fails to resolve the challenge within the five working day period, you shall be allowed to enroll in the course. If no space is available in the course when a challenge is filed, the challenge shall be resolved prior to the beginning of registration for the next term, and if the challenge is upheld, you shall be permitted to enroll if space is available when you register for that subsequent term.

Transcripts/Advanced Standing

Transcripts from other colleges and universities must be received by the Admissions and Records Office no later than the end of the first semester of attendance.

Transcripts received become the property of Palomar College and cannot be returned to the student or forwarded to other schools.

Courses, units, and grades from other regionally accredited colleges and universities that are accepted will be applied toward the completion of academic degrees or certificates of achievement at Palomar College. Units accepted may also be applied toward transfer patterns to four-year institutions.

Transcripts from foreign schools or universities must be evaluated by an approved credentials evaluation service.

Refer to the Academic Regulations and Standards section of the catalog regarding acceptance of non-traditional credit.

Student Classification

Freshman

A credit student who has completed less than 30 semester units.

Sophomore

A credit student who has completed 30 or more semester units, but does not have an A.A. degree.

Unclassified

A registered credit student who, by definition, is neither a freshman nor a sophomore.

Financial Aid Application and Enrollment Fee Waiver

Students are encouraged to stop by the Financial Aid & Scholarships Office to obtain information and an application for federal and state financial aid early.

In addition, enrollment fee waivers are available at the Financial Aid & Scholarships Office or in the class schedule. Approval must be confirmed at least 48 hours prior to registration.

Current and potential financial aid students are advised to only take courses that are required for their declared program of study at Palomar College.

Enrollment Options

Community Education Classes

Non-credit courses which support life-long learning. May be either full term or short term.

Community Development Seminars

Non-credit workshops, classes, seminars, activities and events to help you continue learning throughout your life. Usually taught as evening or weekend courses.

Fast Track

Fast-track courses, which are eight weeks in duration, are offered throughout the calendar year. The work that students complete in a semester-length class is compressed into eight weeks. These classes are intensive, but they allow students to move quickly to advanced study or to a career.

Full Term Classes

A regular semester course of 17 weeks.

Intersession Classes

Courses offered between regular terms.

Late Start Classes

Accelerated courses which are less than 16 weeks, but which must be completed within a semester/ session.

Learning Communities

An enriched learning experience linking different courses around a central theme or question. Students must enroll in the whole block of courses, and progress through the semester as a group.

On-line Classes

On-line classes offer convenience for students with busy schedules. Students must have reliable access to e-mail and the Internet. You can "attend class" at any hour of the day or night, and communicate with your instructor via e-mail or electronic discussion boards as your schedule allows. Attendance at some on-campus activities may be required for some on-line classes. Student financial awards may be impacted in certain cases. Please check with the Financial Aid Office for more information. On-line classes are academically equivalent to traditional face-to-face classes. For more information, visit our web site at <http://www.palomar.edu/pconline>.

Regional Occupational Program (ROP)

ROP offers tuition-free courses, regardless of income, and serves all residents of San Diego County 16 years of age and older. Classes provide entry-level, upgrade, and advanced job skills training.

Saturday Classes

Academic or vocational courses taught on Saturdays, generally in the mornings. May be either full term or short term.

Self-Paced Classes (Open Entry)

Courses which allow flexibility in scheduling, where a student may enroll at any time up to a designated date in the semester/session. Hours of attendance are arranged with the instructor. Depending upon unit value, a specified number of hours must be completed to receive credit.

Short Term Classes

Any course which is less than 17 weeks.

Summer Session

Mini sessions offered during the summer, generally either 6 weeks or 8 weeks in length.

Telenet Classes

Telenet classes are TV courses that utilize the Internet and electronic communication to supplement the traditional video presentation of the course. Students may view video lessons on cable, online or are available for check-out at six different locations. Computers will be used for assignment preparation, examinations, and for communication between students and faculty. Students must have reliable access to the Internet and an email account. Computer literacy is highly recommended. If a computer is not available at home, there are computer labs available for student use on campus. Most Telenet classes will require the student to attend an orientation session with the instructor. Student financial aid awards may be impacted in certain cases. Please check with the Financial Aid Office for more information. For additional information, visit our web site at <http://www.palomar.edu/etv>.

Television Classes

A TV course is a regular college credit course which uses television to deliver instruction. Each telecourse includes televised lessons, a text, as well as procedures for discussion, assignments and examinations. Students may view video lessons on cable, online or are available for check-out at six different locations. Although telecourse study is based primarily in the home, you are expected to interact with the instructor on a regular basis by telephone, email or during your scheduled campus meetings. You must make time to view your lessons and complete assignments. In order to receive credit or an evaluative grade, you must attend the campus meetings. TV courses are academically equivalent to the traditional campus course. They satisfy either pre-collegiate, elective or general education requirements toward a certificate or A.A. degree. For more information, visit our web site at <http://www.palomar.edu/etv>.

Videoconference Classes

Videoconference classes are college credit courses taught by the instructor to more than one site simultaneously. Communication is two-way and interactive. Interactive videoconferencing allows students to meet face-to-face with the instructor on-campus and with students in a classroom off-campus. Two-way interactive videoconferencing sends and receives live video and audio simultaneously between two or more sites. For more information, visit our web site at <http://www.palomar.edu/etv>.

Weekend College

Attend classes offered on Friday evening, Saturday and Sunday.

Enrollment Procedures

All new and returning students should submit their application for admission as soon as possible after the date applications are first accepted. Early applications secure earlier enrollment appointments. Check the 2005-2006 college calendar in the front pages of this catalog for the dates applications are accepted.

The Class Schedule

Students are informed of the enrollment procedure to be followed in the official Class Schedule for each semester.

Online Enrollment

All students may use Student eServices to enroll. Continuing students have automatic eligibility to enroll. New and returning students are also eligible after submitting an Application for Admission at the main campus or at a College Center or online at www.palomar.edu. All students are issued a unique Palomar user ID number, which will be used for enrolling and all other transactions with Palomar. See the class schedule for more information.

Procedure for Adding and Dropping Classes

Adds and drops are processed online in Student eServices until the semester deadline date (see class schedule). You may be required to obtain a permission number from the instructor to add a class.

All additions to a student's program must be processed within the first two weeks of classes. Exceptions to this deadline include late-start and open-entry classes.

Official Withdrawal

Students must drop classes by using Student eServices. Refer to "Dates and Penalties" below for any penalties which may be imposed.

Unofficial Withdrawal

Students who simply stop attending class and do not drop through Student eServices have unofficially withdrawn. These students may receive an "F" or "FW" grade in every class they stop attending.

Administrative Withdrawal

Administrative withdrawals may occur for academic or disciplinary reasons, or for non-payment of fees. If the administrative withdrawal occurs after the refund period, the student will not be entitled to a refund or waiver of registration fees.

Dates and Penalties

If a student processes a drop during the first four weeks of a full semester course, or first 30% of a short-term course, no grade will be assigned and no notation will appear on the student's permanent record.

Between the fourth week and the eighth week of a full semester course, or between 30% and 50% of a short-term course, a student may process a drop at his or her discretion and receive a withdrawal (W grade).

After the eighth week of a full semester course, or 50% of a short-term course, only evaluative (A, B, C, D, F, FW) or Incomplete (I) grades shall be assigned.

All students are expected to attend classes. Failure to attend classes can result in an "F" or "FW" grade, unless the student executes a drop within the time periods indicated above. Refer to the 2005-2006 college calendar for specific

dates.

Petition Appeal Procedure

Students who have verifiable extenuating circumstances may petition to withdraw from a class after the eighth week of a full semester course, or 50% of a short-term course. See "Conditions for Petition to Withdraw" listed under the Grading System in Section 5 of the catalog.

Class Cancellations/Changes

Palomar College reserves the right to cancel any class for which the enrollment is not sufficient to warrant continuation, and to change the class hours and/or days as necessity demands. Students enrolled in classes that are cancelled by the College are entitled to a refund of fees, with no processing charge.

Fees and Expenses

Palomar College is a public California Community College. All students must pay enrollment and health fees; California non-residents and international students must pay non-resident tuition.

Fee Payment Procedure

Students are responsible to pay all mandatory fees. All fees are due 10 days after enrollment; however, after classes have begun, all fees become due immediately. Students who do not pay fees will be dropped from classes, but may still owe enrollment fees. The college will refund enrollment fees only when a drop is processed within the first two weeks of class. Administrative drops may result in the withholding of services (transcripts, enrollment, etc.) until fees for the dropped classes are paid.

Fees are subject to change; please check the current class schedule for a complete, up-to-date list. All required fees must be paid at the time of registration.

For information on exemptions from fees, please refer to the current class schedule or check with the Financial Aid Office. Active duty military members should contact their Base Education Office for information on tuition assistance.

Auditing Fee

\$15 per unit – Refer to Section 5, Auditing a Class, for specific information on selecting audit status.

Enrollment Fee

\$26 per unit – This mandatory fee is subject to change.

International Student Capital Outlay Fee

\$6 per unit – This is an additional fee for international students only. This fee is subject to change. Please refer to the current class schedule.

Materials Fee

Students may need to provide materials required for a credit or noncredit class. Such materials must be of a continuing value to the student outside of the classroom setting. The materials may be available through the District or may be purchased elsewhere.

Non-Resident Tuition

\$149 per unit – California non-residents and international students must also pay all other applicable fees. Please refer to the current class schedule.

Palomar Identification Card (PIC)

\$5 per semester – This optional card can be used for easier access to the Library, Bookstore, Student Services and on-campus labs.

Parking Fee

\$40 per semester, \$20 for students receiving BOGW – Please refer to the current class schedule.

Returned Check Charge

\$20 for each check returned to the college.

Student Activity Fee

\$10 per semester – With this optional fee, students will be given a validation sticker to attach to their Palomar Identification Card (PIC). The student activity fee offers discounts on campus and from area merchants.

Student Center Fee

\$1 per unit up to a maximum of \$10 per year – This fee is charged for classes taken at the San Marcos campus only. The funds generated from this fee will finance the construction, enlargement, refurbishing and operation of a student body center, also known as a Student Union (beginning Spring '99).

Student Health Fee

A state-mandated student health fee is charged for operation of the Health Center or Centers as authorized in Education Code 76355. The maximum student health fee allowable will be charged to all part-time and full-time students enrolled in the credit and non-credit classes offered through Palomar College, except the following:

Exempt by law:

- Low-income students who demonstrate financial need using the methodology established by the Board of Governors and contained in Section 58620 of Title 5
- Students taking only apprenticeship classes.
- Students who depend exclusively upon prayer for healing in accordance with the teachings of a bona fide religious sect, denomination or organization.
- Dependent children and surviving spouses of members of the California National Guard who are killed or permanently disabled while in active service.

Other exemptions:

- Active military students taking classes at only Camp Pendleton
- Student in Community Services Seminars
- Worksite Education training for company employees only.
- Non-credit classes at sites other than at the San Marcos Campus and the Escondido Center.

The current Student Health Fee is \$12 for the Fall and Spring semesters and \$9 per Summer session. The fee is subject to change.

Student Representation Fee

\$1 per semester – This optional fee provides for the support of student representatives who state positions and viewpoints before city, county, and district governments, and before offices and agencies of the state government. A student may refuse to pay the Student Representation Fee for religious, political, financial or moral reasons.

Transcript Fee

Two transcripts are provided to each student at no cost. Additional copies may be obtained for three dollars (\$3) each. Refer to Section 5, Official Transcripts, for specific information on requesting transcripts.

Refunds**Refund Policy for Resident Student Fees**

Please see the current class schedule for policy and appropriate dates/deadlines.

**Nonresident and International Student
Tuition**

Refunds are made only to students who officially withdraw from a class or from the college by the refund deadline. Please see the current class schedule for the appropriate deadline date.

Parking and Materials Fees

Please see the current class schedule for information.

Appeal Procedure

Any appeal of the rules for obtaining a refund of fees above must be made in writing (Petition for Refund) to the Director of Enrollment Services. The appeal must include the reason(s) for requesting an exception, and any available background material to support the reason(s).

STUDENT SERVICES



3



Section 3 – Student Services

Admissions and Records

SSC #49, Ext. 2164

The Admissions, Enrollment, Records, and Evaluations Office provides a variety of services to students. It is usually the first office prospective students' visit, and the last office students see before transferring or graduating. Following are some of the services provided.

All students must submit an application for admission in order to attend Palomar College. The admission application permits a student to enroll, and sets up a history for each student. The Admissions and Enrollment area also processes adds, drops, reinstatements, refund petitions, petitions for audit and credit-no credit, and accepts requests for transcripts and verifications of enrollment.

The Records and Evaluations area is responsible for a wide variety of services. These include processing grades and maintaining academic records; maintaining student history information, such as name and social security number changes; processing requests for transcripts and past semester enrollment verifications; receiving transcripts, tests results, etc. from other institutions; processing Petitions for Academic Renewal, Credit by Examination, and Course Repetition; evaluating records and transcripts for graduation and transfer; and enforcing academic regulations.

Articulation Services

SSC Bldg., Ext. 2528

The Palomar Articulation Officer secures course articulation agreements with colleges and universities throughout California and out of state. Students use these agreements to plan their educational programs in preparation for transfer to a four year college or university. Agreements and course requirements are available in the Counseling offices and on-line at <http://www.assist.org>

Athletics

O-10 Bldg., Ext. 2460

Palomar College has intercollegiate teams in the following men's sports: baseball, basketball, football, golf, soccer, swimming, tennis, volleyball, water polo, wrestling, and cross country. Women can compete intercollegiately in the following sports: basketball, cross country, softball, soccer, swimming, tennis, water polo and volleyball. Contact the Department of Athletics for more information (760) 744-1150, ext. 2460.

Bookstore Services

SU Bldg., Ext. 2220

The Palomar College Bookstore is a comprehensive operation that provides textbooks, supplemental reading materials, and auxiliary supplies for students and staff.

Textbook services are provided by the bookstore at most Educational Center locations. Check the Class Schedule for exact times and locations. The Bookstore is a lease operation run by Follett Corporation and is responsible for its own income and expenses. Hours of operation for the San Marcos campus during regular semesters are Monday through Thursday 7:30 a.m. to 7:30 p.m. and Fridays 7:30 a.m. to 1:30 p.m. Hours will change during registration; please check the Class Schedule.

Career Services

SSC #24, Ext. 2194

The Palomar College Career Center has an up-to-date career resource library and a computer lab that provide career, college and job search information. Computerized career assessments/inventories are available free-of-charge. Career Center staff assist students with career exploration and using all resources in the Career Center.

The Career Center offers short term counseling classes (three class sessions each), Career Search, Counseling 165 and Major Search, Counseling 170. Career Search assists students in the career decision making process through assessment and exploration. Major Search helps students assess their interests in order to choose a college major and develop an educational plan. Both classes are available throughout the year on the San Marcos campus.

Career Center services are available to Palomar College students, staff and the community. For more information about the Career Center visit the web site <http://www.palomar.edu/counseling/careercenter/>.

Children's Center

CDA Bldg., Ext. 2575

The Child Development Instruction and Services Center is an NAEYC (National Association for the Education of Young Children) accredited laboratory preschool program.

The Child Development Instruction and Services Center in San Marcos provides services to approximately 150 children ages 18 months to five (5) years of age. The Center receives funding from the California Department of Education and from parent fees. The Center serves children of Palomar College students, faculty, staff, and community members. The Center also serves as a laboratory for students who are Child Development majors. Students are trained in proper room environments, appropriate group experiences, activities and techniques.

The San Marcos Center is open from 7:00 a.m. to 6:00 p.m., Monday through Friday. Children must be enrolled in a minimum of two days. Enrollment is not available on a drop in basis. Subsidized services are provided to the children of income qualified Palomar College students at no or low cost, based on family size and income.

The Escondido Child Development Center opened spring 2000. This Center serves approximately 44 children three to five years of age. The Center is open from 7:00 a.m. to 5:30 p.m., Monday through Friday. The State Preschool program operates at the Escondido Center.

State preschool services are available to 4-year old children of any family, within our community, who are low income and meet the guidelines set forth by the California Department of Education. Children attend all five days, three (3) hours per day.

Counseling Services

SSC #24, Ext. 2179

Academic advisement, career guidance, Cyber-counseling, and personal counseling related to academic success are provided in the Counseling Center, located in the Student Services Center. Counseling services are provided according to the needs of each student as described below.

Academic advisement is available to students seeking assistance with scheduling or clarification of requirements for certificates, graduation or transfer. Inasmuch as careful course selection is a key to a successful college experience and is subject to change, it is wise for students to consult with a counselor each semester.

Career guidance is available in the Career Center, through career classes, and with individual appointments.

Personal counseling is available to the students who may seek the assistance of a professional counselor in finding solutions to problems that may be affecting their academic progress. A counselor may also provide further assistance in helping students understand their attitudes, feelings, and academic potential, thereby enabling them to make realistic decisions. Appropriate referrals may also be given.

Assessment and orientation provide students with eligibilities in math, English, and reading. A general overview of the college, its programs and services, and preparation for registration are included.

Disability Resource Center (DRC) **DSP&S Bldg., Ext. 2375**

DRC provides special counseling, services and instruction for those with physical, learning, vision, hearing, communication and psychological disabilities.

The following is available to qualified students: orientation, on-campus transportation, special parking, priority registration, counseling, testing, supportive instruction in English, math, speech/language, reading, and adapted physical education. An adapted computer instruction program provides varied instruction for those with specific disabilities.

Interpreters for the deaf, readers, notetaking assistance, testing accommodations, mobility assistance and access to alternative media are also offered.

Special equipment including power wheelchairs, computers, tape recorders, and other equipment are part of the support services offered to students with disabilities.

The DRC program acts as an advocate for students with disabilities representing their interests on campus as well as with various state and local agencies including the State Department of Rehabilitation.

Call DRC for further information at (760) 744-1150, ext. 2375; the TTY number for the deaf and hard of hearing is (760) 471-8506. Visit our website www.palomar.edu/dsps.

Extended Opportunity Programs and Services (EOP&S)/CARE **TCA Bldg., Ext. 2449**

EOP&S is a state-funded program designed to provide support services and benefits for students who are financially and educationally disadvantaged. CARE, also a state-funded program, assists single parent recipients of TANF/CalWORKs who would like to attend college. These programs offer academic and support counseling, priority registration, four-year college fee waivers, student success workshops, financial aid and other support services. The EOP&S/CARE office, located on the San Marcos campus, TCA building, is open Monday and Tuesday, 8:00 a.m. to 3:00 p.m. Phone: (760) 744-1150 ext. 2449; website www.palomar.edu/eops/

REACH is Palomar's support program for CalWORKs students. The REACH program serves parents who are attending school as part of their welfare-to-work plan with the county. To be eligible, the student must be a current CalWORKs recipient or have received aid within the last two years. The student must also be working toward a certificate, AA degree, transfer to a four-year university, or to improve work skills.

Benefits include: academic and support counseling, priority registration, student success workshops, financial aid and other support services. The student does not have to be a full-time student to receive benefits. Phone (760) 744-1150, ext. 2449.

Financial Aid and Scholarships **SSC #50, (760) 891-7510**

Information on options for financial assistance to help minimize the student's financial burden of a college education is available at the Financial Aid & Scholarships Office, or log on to our web site at <http://www.palomar.edu/fa/>. Financial assistance comes in the form of waivers, grants, part-time employment, student loans, and scholarships. The following is a brief summary of the aid programs available at Palomar College.

Board of Governor's Waiver (BOGW)

This program waives the enrollment fee for all eligible California resident students. It also waives a student's health fees. Application forms are available inside the class schedule or at the Financial Aid Office.

Cal Grant (Cal B, C)

This is a state funded program and is awarded to students based on a formula determined by the California Student Aid Commission. The formula includes factors such as income/assets and grade point average. Must have a minimum enrollment of six (6) units.

Institutional Emergency Loans

Short-term emergency student loans are available for students enrolled during the current semester who are Pell Grant eligible or student employees and who demonstrate an unexpected emergency need for funds to continue their education at Palomar College. Must have a minimum enrollment of six (6) units.

Federal Pell Grant

This grant is an entitlement award and usually awarded to low-income students. Students with a Bachelor's Degree are not eligible.

Federal Supplemental Educational Opportunity Grant (FSEOG)

This grant is usually awarded to students who have already been awarded the Pell Grant and have demonstrated high unmet financial need. Must have a minimum enrollment of six (6) units.

Federal Work Study (FWS)

This program provides part-time employment on campus. The award does not have to be repaid BUT must be earned through employment on campus. Must have a minimum enrollment of six (6) units.

Subsidized William D. Ford Federal Direct Loan

This is a federal student loan program in which the government makes loans available to students to be used for direct educational expenses. The interest rate is variable. Repayment begins six (6) months after the student is no longer

enrolled in college or drops below six (6) units of enrollment. The government does not charge interest on the loan while the student is in school.

Unsubsidized William D. Ford Federal Direct Loan

This loan is similar to the Subsidized William D. Ford Federal Loan in that it is to be used for direct educational expenses BUT is certified for students who cannot demonstrate financial need. The student pays the interest at all times on this loan. Variable rate.

Social Security Number and Name Match

A student's financial aid record is maintained according to the student's social security number and legal name. All financial aid applicants are required to make sure that their social security number and legal name not only matches with legal documentation but also matches with their student academic records. Mismatches will void your financial aid application.

Scholarships

Private scholarships sponsored by individuals and organizations are available. Selection criteria and amounts are determined by the donors and vary.

Students are encouraged to call for more information at (760) 744-1150, ext. 2846, log on to our web site at <http://www.palomar.edu/fa/>, or stop by the Financial Aid and Scholarships Office and pick up an application form. The Financial Aid and Scholarships Office is located in the Student Services building, #50.

Food Services

SU Bldg., Ext. 2233

Dining Services offers a variety of options for both students and staff on the Palomar Campus. The Comet Café located across from the Student Union, offers a variety of venues for customers to choose from. Bene Pizza offers freshly baked pizza and Italian specialties, or you can enjoy a fresh sandwich from Subway. The Grill provides a selection of favorites, from burgers to Philly Cheese Steaks. Worlds' Fare offers a selection of international favorites and Kettle Classics provides a daily selection of homemade soups and chili. The Comet Café also has an extensive selection of grab and go beverages, snacks and entrees.

Java City located in the Student Union provides our customers with a full service espresso and smoothie bar where you can enjoy your morning coffee or your favorite smoothie. Java City provides extensive grab and go selections including salads, sandwiches, and a variety of pastries. Java City also offers a selection of pizza and fresh soup during lunch and dinner hours.

The Pavilion Coffee Shop is located behind the Bohem Gallery, and offers a full service espresso bar for our customers. The Pavilion has a large selection of snacks, including grab and go beverages, pastries and candy.

The Snack Shack offers a variety of bottled beverages, coffee and snacks for both students and staff.

GEAR UP Program **(760) 290-2521**

GEAR UP (Gaining Early Awareness and Readiness for Undergraduate Programs) is a Palomar College educational partnership grant program with the San Marcos Unified School District (SMUSD) and includes: The Boys and Girls Club of San

Marcos, San Marcos Chamber of Commerce, North County Times, Cox Communications, Imagine San Marcos, Padres Unidos, San Marcos Middle School, and San Marcos High school.

GEAR UP staff work with SMUSD 5,000+ 5th grade through 12th grade students, parents, teachers, and administration to offer a variety of early academic intervention programs and services, while creating a college-going school culture and helping ALL students to succeed and make plans to pursue higher education.

GEAR UP provides a wide network of support with the involvement of community based organizations, businesses, local colleges and universities, Palomar College students, faculty, and staff. GEAR UP creates innovative programs that help all students within an entire grade level while creating positive changes for student success. Funded through the United States Department of Education, GEAR UP is mandated to create a dollar-for-dollar match through community contributions, college involvement, and in-kind support. The primary objective is to create a seamless education from K-College for students and their parents, and to promote college knowledge early so more students are better prepared for postsecondary education.

GEAR UP has opportunities for student employees (tutors/mentors), volunteers, federal work study students, faculty/staff, and community services learning students to get involved in K-12 education as part of the school day, after school, or with our evening and weekend programs, events, or field trips. Anyone interested should contact Grant Funded Student Programs/GEAR UP at (760) 290-2521, or visit our web site at www.palomar.edu/gearup.

Health Services

SHS Bldg., Ext. 2380

All currently enrolled students who have paid a health fee qualify for a variety of free or low-cost health benefits. Registered nurses are available during operational hours to assist with health needs, evaluate health concerns and provide treatment and/or community referrals. Services include: emergency/first aid care, immunizations, TB tests, hearing, vision and blood pressure screenings, and cholesterol blood testing. Over-the-counter medications are available in Fast Aid Stations located in Health Services and the Admissions area on the San Marcos campus and by the Health Services office in Escondido. Health counseling and education are also offered to assist students with nutrition, sexually transmitted infections, lifestyle alternatives and wellness.

APPOINTMENTS ARE NECESSARY FOR: Routine nursing procedures and physician visits.

For more information: San Marcos Campus, call (760) 744-1150, ext. 2380; Escondido Center, (760) 432-0624, ext. 8105, or visit our web site at: <http://www.palomar.edu/healthservices>.

International Education **SU-103, Ext. 2167**

The Office of International Education specializes in admitting and assisting international students on F-1 and M-1 visas. Palomar College has approximately 300 international students enrolled each year, representing over 47 countries. The Office of International Education administers specialized orientation and assessment sessions for their students, as well as offer

assistance with class selection and registration. The office also assists students with immigration advising, housing needs when possible, and a variety of academic and personal issues that may arise during their stay at Palomar.

The office maintains information on TOEFL exams, medical insurance requirements, and foreign credentials evaluation services. For detailed information on international student admission, please refer to Section 2, Admissions and Registration, call the Office of International Education at (760) 744-1150, ext. 2167, or visit our web site at <http://www.palomar.edu/internationalstudents>.

In addition to services provided to international students, the office is responsible for the membership in the Southern California Foothills Consortium, which offers semester-length study abroad programs in London and Salamanca, Spain. For detailed information on these programs, call the Office of International Education, (760) 744-1150, ext. 2167 or visit our web site at <http://www.palomar.edu/studyabroad>.

Library Services

LL Bldg., Ext. 2612

The Palomar College Library collection houses over 130,000 items including books, periodicals, videos, CDs, DVDs and audiocassettes. Patrons have access to a variety of reference material in different formats including microfilm, Internet databases, and printed material. In the Academic Research Lab, located on the second floor in the reference area, state-of-the-art media provide access to online full-text journal articles which augment the library's extensive print magazine, newspaper, and journal holdings. This information is available over the internet, in-house as well as off-campus once the user has obtained the necessary password from the circulation desk.

Research assistance is available at the Reference Desk for individuals as well as entire classes. Librarians offer bibliographic instruction classes tailored to a variety of topics. The Library's online catalog can be searched in-house or off-campus over the internet. The Library web site can be found at <http://www.palomar.edu/library/>.

At the Circulation Desk, services include checkout of library material, missing book searches, and renewals. Information about instructor reserves, nursing reserves, legal reserves, and Interlibrary Loan items are available at this desk. Material from the media collection is also circulated at the Circulation Desk. Patrons can also check out videos or DVDs for class assignments to watch in-house. Equipment is also available to listen to audiocassettes, CDs, and view DVDs.

Audio Visual Services provides portable media and computer equipment for the entire campus as well as sound equipment for special events. A-V staff also offers training and assistance with equipment needs.

Also housed in the library building on the first floor are:

Academic Technology	ext. 2657
DRC Adaptive Computer	
Training Center	ext. 3081
Tutoring Center	ext. 2448

The Ernest J. Allen Library in the Escondido Center offers a full range of academic library service. This branch of the Palomar College Library provides an area for students to read, browse, use computers for research, check out library material and ETV video class tapes, and to photocopy material. Class orientations and instructor reserve services are available. Intra-library loan provides access to material from the San Marcos campus library.

The Library also supports a shared-use facility on the Pauma Reservation, the AA'Alvikat Library, (760) 742-1289.

School Relations

SU-1, Ext. 2182

School Relations is coordinated through the Counseling Department. Activities with local high schools and middle schools are planned and conducted on an individual basis to initiate and maintain positive relations. For more information please contact: the Assessment Coordinator/School Relations, (760) 744-1150, ext. 2182 or e-mail Assessment@palomar.edu.

Office of Student Affairs

SU-201, Ext. 2594

The Office of Student Affairs is a very valuable resource for students. The Director of Student Affairs is responsible for student co-curricular activities, the Associated Student Government, clubs, student discipline, administration of the District's free speech policy, and Student Union usage. Students and members of the community can access and post on the Office e-classified ads and the Office of Student Affairs also administers the Gene Jackson Emergency Loan Program for students. All vendors desiring access to the college community must have approval from this office. The Director of Student Affairs also oversees the operation of the college food services and bookstore. This office also handles student initiated grievances and enforces the College smoking policy.

Associated Student Government

SU-102

The Associated Student Government (ASG) is elected by students taking credit courses. Members of student government represent all students in the shared governance process of the college. Academic credit is available to all students participating in ASG and is the official means of communication between the students and other organizations of the college.

Comet Center

SU-104

The Comet Center provides many valuable services to the students of Palomar College. This is an excellent source of information about the college and student life and student activities. The Center produces and renews the student identification card which is used throughout the campus. The ID card is necessary when using the services of admissions, bookstore, Counseling, English Lab, Math Center, Library, Tutoring, Health Services and other student service areas. The ID card is also used to track student hours in lab-type classes, and to monitor access to college services. The ID card is a worthwhile card to have, not only for easy access to Palomar services, but also for great student discounts offered by many of our local businesses. The Comet Center also rents lockers and sells parking permits, discount movie tickets, monthly bus passes, and tickets to various amusement parks. The Comet Center also assists with information related to alcohol and drug abuse prevention programs and referral services.

Inter-Club Council

The Inter-Club Council is comprised of club representatives from all campus clubs and organizations. Students interested in starting their own club should contact the Office of Student Affairs located in the Student Union building.

Student Participation in Governance

The Palomar College governance structure provides for representation of students. Students are appointed to college committees by the Associated Student Government. For further information call (760) 744-1150, ext. 2594.

Transfer Center **SSC Bldg., Ext. 2552**

The Transfer Center coordinates all aspects of the admission guarantee programs to the University of California system, as well as provides updated information regarding successful transfer to all four-year universities. Cross-enrollment processing, application assistance, and the opportunity to schedule appointments with visiting four-year university representatives are but a few of the services that are offered.

Students interested in transferring should plan in advance to understand critical application filing periods and procedures. For more detailed transfer information link to the Transfer Center web page at <http://www.palomar.edu/counseling/transfercenter>.

TRIO Programs

Since 1965, America's federally funded TRIO programs have been helping students from low-income families and first generation backgrounds to finish high school, succeed in college, and successfully graduate and/or transfer. These programs help assure that students from disadvantaged backgrounds have the support necessary to enter college and graduate and/or transfer to a four-year postsecondary institution.

There are eight federally-funded TRIO programs nationally, and three are hosted at Palomar College under Grant Funded Student Programs. These are Upward Bound, Student Support Services, and NCEOC (North County Educational Opportunity Center). Visit our web site at www.palomar.edu/grants

TRIO/Student Support Services **TCB #4, Ext. 2761**

TRIO/Student Support Services at Palomar College is designed to provide support services to potential transfer college students and enhance their chances for successful completion as they pursue their baccalaureate degree.

In order to receive assistance through TRIO/Student Support Services, students must be enrolled at Palomar College, need the services of the program, and meet eligibility requirements. Program services include academic advising, tutoring, priority registration, personal, career and transfer counseling, direct grant assistance (per eligibility), college/university visits, student success workshops, financial aid information, and cultural events. All participants must be either low-income, first generation college, and/or disabled.

For further information call TRIO/SSS at (760) 744-1150, ext. 2761, or visit our web site at www.palomar.edu/TRIOSSS.

TRIO/North County Educational Opportunity Center **ST 26, Ext. 2364 or** **Escondido Center, Ext. 8110**

The Palomar College North County Educational Opportunity Center (NCEOC) is a program funded by the U.S. Department of Education. NCEOC staff provides information and advising

to qualified adults (low-income and or first generation college) who want to enter or continue attending an adult school (GED program), community college (including ESL, vocational, certificate and degree programs), or other educational institutions (after high school).

The program staff provide academic advisement, career advisement, financial aid information, access to postsecondary tutoring, test preparation and workshops designed to support student success.

For more information about NCEOC eligibility or to volunteer or do an internship with the program, call (760) 744-1150, ext. 8110, or visit us at www.palomar.edu/nceoc.

TRIO/Upward Bound **Escondido Center, Ext. 8158**

TRIO/Upward Bound at Palomar College helps 55 local area high school students be more academically successful in school, while preparing for higher education choices. Participants receive supplemental instruction and tutoring/mentoring in literature, composition, foreign language, mathematics, and science at Palomar College and after school, on Saturdays, and during the summer.

In order to participate in TRIO/Upward Bound, students must be enrolled in the following high schools: San Marcos, Oceanside, El Camino, Escondido, Orange Glen, or San Pasqual. Program services include academic/career advising, tutorial program, college admission assistance, financial aid information, study skills workshops, PSAT/SAT/ACT preparation, college campus visitations, educational/cultural trips, parent workshops, and a summer residential program.

The Upward Bound program hires Palomar College students and staff/faculty to serve as tutors, mentors, and Saturday instructors. Anyone interested should contact the UB office, (760) 744-1150, ext. 8258, or visit us at www.palomar.edu/upwardbound.

Tutorial Services **LL Bldg., Ext. 2448**

The Tutorial Center, located in the Library, first floor, provides help in many academic subjects offered by Palomar College. Students are served on a walk-in basis and must be registered in the course(s) for which they are seeking assistance. Tutors hired to work for the Center are trained in tutoring methods and learning strategies. For more information about this service, contact the Tutorial Center. Refer to the class schedule for office hours or call (760) 744-1150, ext. 2448 or at pctutoring@hotmail.com.

Veterans' Services **SSC #48, Ext. 2173**

The Veterans' Services Office, located in the Student Services Center, provides information on veterans' education benefits and services; helps veterans, dependents and active duty military with applications and forms needed to collect their G.I. Bill benefits. Students are served on a walk-in basis.

New students are required to:

1. Complete the Palomar College Application for Admissions.
2. Select a major and make a counseling appointment through the Counseling Office to obtain an educational plan.
3. Register for classes. Students are responsible for paying

their registration fees.

4. Pick up a Veterans' Services benefit package from the Veterans' Office.

New students will submit the completed package to the Veterans' Services office after they have registered in their classes.

Continuing students should contact the Veterans' Office prior to the end of each semester to keep their VA payment coming for the next semester. It takes about eight to twelve (8 to 12) weeks for processing of VA Educational claims.

Students are paid VA benefits based on their attendance in classes, and must reapply to Veterans' Services each semester if they wish to receive benefits. Students are required to choose a major and enroll in classes required for that major. Official transcripts from all previous schools, colleges, military training and CLEP tests must be submitted to the college for evaluation before the end of the students first semester of attendance.

Because not all courses are VA approved or payable, students should, prior to registering, contact the Veterans' Advisor for review of their classes. Students cannot repeat courses for VA pay, and must report all changes in their classes and units, including adds and drops both to the Admissions and Veterans' Office.

California Veteran Dependent Exemption

The children and spouses of U.S. veterans with service connected disabilities or veterans who have died in service or from service connected disabilities may be eligible for waiver of college fees. For more information see the Veterans' Services office.

Servicemembers Opportunity Program

As a Servicemember Opportunity College, Palomar College provides academic assistance to active-duty personnel which includes program planning and guidance in understanding educational options, acceptance of traditional and nontraditional learning experiences, tutoring or similar learning opportunities. Courses are offered in the evening, on weekends or other nontraditional time frames, and at the Camp Pendleton Marine Corps base.

ConAP Program

ConAP, a joint program between the Army and Palomar College, admits new soldiers to the college at the same time they enlist in the Army or Army Reserve. Army recruiters refer new soldiers to the college. Eligible soldiers are admitted, either on a full or provisional basis with enrollment deferred until completion of active military services. For more information contact the VSO or your local Army recruiter.

SOCNAV/SOCMAR Programs

SOCNAV/SOCMAR programs are open to Navy and Marine personnel and their families and were established to enhance the quality of college programs. They provide them opportunities to complete college programs without suffering credit loss because of frequent changes of duty station. SOCNAV/SOCMAR schools accept credit for rates and ratings as recommended by the ACE Guide and guarantee transfer of courses among each other in numerous degree programs.

For more information, contact the Palomar College Camp Pendleton Center at (760) 725-6626; or contact the VSO at (760) 744-1150, ext. 2173.

STUDENT RIGHTS & RESPONSIBILITIES

4



Section 4 – Student Rights and Responsibilities

Each student is responsible for following the rules and regulations in this catalog. Furthermore, each student is responsible for his/her enrollment in classes and for attending classes. The College is not liable if the student fails to read and understand the rules.

Academic Integrity

The Center for Academic Integrity at Duke University* defines academic integrity as a commitment, even in the face of adversity, to five fundamental values: honesty, trust, fairness, respect, and responsibility. From these values flow principles of behavior that enable academic communities to translate ideals into action.

Palomar College is wholly committed to the idea and ideals of academic integrity. We embrace and adopt the definition and related principles of academic integrity provided by the Center for Academic Integrity stated in the paragraph above. Following are the explanations of the five principles as provided by the Center for Academic Integrity and adopted by Palomar College.

1. **Honesty:** Begins with oneself and extends to others. In the quest for knowledge, we must be honest with ourselves and with each other, whether in the classroom, laboratory, meeting, library, or on the playing field.
2. **Trust:** Only with trust can we believe in the research and efforts of others and move forward with new work. Only with trust can we collaborate with individuals, sharing information and ideas without concern that our work will be misappropriated or misused, our reputations diminished, or our academic careers harmed. Only with trust can our communities believe in the social and economic value and meaning of an institution's scholarship and degrees.
3. **Fairness:** Important components of fairness are predictability, clear expectations, and a consistent and just response to dishonesty. All campus constituencies have a role in ensuring fairness and a lapse by one member of the community does not excuse misconduct by another.
4. **Respect:** Demonstrated by attending class, being on time, paying attention, following instructions, listening to other points of view, being prepared and contributing to discussions, meeting academic deadlines, and performing to the best of our ability. Being rude, demeaning, or disruptive is the antithesis of respectful conduct. We show respect for the work of others by acknowledging our intellectual debts through proper identification of sources.
5. **Responsibility:** Shared responsibility distributes the power to effect change, helps overcome apathy, and stimulates personal investment in upholding academic integrity standards. Being responsible means taking action against wrongdoing, despite peer pressure, fear, loyalty, or compassion. At a minimum, individuals should take responsibility for their own honesty and should discourage and seek to prevent misconduct by others. Whatever the circumstances, members of an academic community must not tolerate or ignore dishonesty on the part of others.

* The Center for Academic Integrity is affiliated with the Kenan Ethics Program at Duke University in Durham, North Carolina.

Debts Owed to the College

Debts occur when a student fails to repay money borrowed from the College, violates a student financial aid contract, fails to pay tuition and/or enrollment fees, library fines, or

bookstore charges. Debts also occur when the student fails to reimburse the College for a returned check, does not return or account for athletic equipment/uniforms, or fails to pay scheduled fees for other services provided by the college. This list of debts is not all inclusive and may include others not specifically listed. If a delinquent debt is sent to the Chancellor's Office Tax Offset Program or another collection agency, a 33% penalty charge will be added to the balance owed.

Palomar College reserves the right to withhold all further services until the debt is paid in full. Grades and transcripts may be withheld until all financial obligations are cleared.

Drugs and Alcohol Policy

It is the policy of the Palomar Community College District to provide, maintain, encourage, and support a drug-free and alcohol-free campus. The commitment of this policy is to education, prevention, rehabilitation, and recovery. An alcohol-free and drug-free campus will promote the safety and health of students, employees, and the public.

All employees and students are clearly and expressly prohibited from the possession, being under the influence, or consumption of alcohol, illegal drugs, or controlled substances on campus, at any school-sponsored event, or while acting within the scope of employment.

The complete policy is included in the Student Guidebook, and is also available in the Office of Student Affairs.

Smoking Policy

It is the policy of Palomar Community College District that there shall be no smoking permitted in buildings or within 20 feet of buildings at Palomar College. Any questions or concerns related to this policy or enforcement should be directed to The Director of Student Affairs in Room SU 201.

Parking and Traffic Regulations

Parking Permits

A valid permit from the college is required for the parking of every motor vehicle on District property. The permit must be placed on the rearview mirror when parked; or, if you have a convertible, a decal may be affixed to the right rear bumper or right rear window and on the left front fork of motorcycles.

Permits may be purchased at the Cashier's Office and PIC Center on the San Marcos campus and at the Palomar College Escondido Center. Semester permits are only valid during dates on permits. One-day parking permits may be purchased for \$2.00 from machines located in student lots #3, #5, #9, #12 and the Escondido campus. Permits are transferable to another vehicle.

Student permits are valid only in designated student parking lots or on the roadway where parking is authorized. Overnight parking is not allowed without prior approval from the College Police Department. Violators will be towed at owner's expense and/or cited.

Citations

Vehicles receiving Palomar College citations have the same legal status as parking citations issued by any other law enforcement agency in California. Citations may be satisfied by paying the fine (bail) within 21 days at the San Marcos campus Cashier's Office, open Monday through Thursday from 8:00 a.m. to 7:00 p.m., and on Friday from 8:00 a.m. to 4:30 p.m. Bail will also be accepted by check or money order via U.S. mail (the citation must accompany the bail deposit). Credit

card payments may also be made at PayMyCite.com. All registered owners are responsible for the citations issued to their vehicle.

For further information regarding the regulations and citations, contact the College Police Department at (760) 744-1150, ext. 2289.

Palomar College Police Department

The Palomar Community College District Police Department was established by the Governing Board of the District effective August 28, 1998. The Police Department is a fully accredited and California POST certified police agency. The Police Department employs trained police officers whose authority is the same as all sworn peace officers in California. The Police Department will exercise the power to issue official citations for violations of the law, and in situations requiring it, may arrest violators, taking them into custody and booking them into the San Diego County Jail located in Vista. Students and staff are advised to give all members of the Police Department their full cooperation and respect as they carry out their important duties to protect students, faculty, and staff while seeking to provide a safe environment on and near District property.

Crime Awareness

Information (reports) concerning occurrences of criminal and non-criminal acts are required to be kept under the Crime Awareness and Campus Security Act of 1990 (as amended) and California Education Code Section 67380. A written request for a copy of any reported incident must be filed at the Palomar College Police Department located at the Mission Road entrance to the San Marcos campus. This written request should be filed 7-10 business days after the date of the incident's occurrence.

All written requests shall be addressed to the Palomar College Police Department, Palomar Community College District, 1140 W. Mission Road, San Marcos, CA 92069-1487. Processing these requests requires a minimum of 3-5 business days.

Sexual Harassment Policy

It is the policy of Palomar Community College in keeping with efforts to establish and maintain an environment in which the dignity and worth of all members of the college community are respected, that sexual harassment of students and employees is unacceptable conduct and will not be tolerated.

This policy applies to the unlawful harassment of any student on the basis of sex by any employee of the District including, but not limited to, classroom conditions, grades, academic standing, scholarships, recommendations, employment opportunities, disciplinary action, or any other aspect of college life within the control of the District or its employees.

This policy also applies to the unlawful sexual harassment of any employee with respect to all terms and conditions of employment with the District, including but not limited to hiring, placement, evaluation, promotion, disciplinary action, layoff, recall, transfer, leaves of absence, training opportunities, compensation, work assignments, and hours of work, shifts, or workload.

Employees who violate this policy may be subject to corrective measures and to disciplinary action up to and including termination of employment. Students who violate this policy may be subject to corrective measure, including discipline, up to and including expulsion.

Sexual harassment is a violation of Title VII of the Civil Rights Act of 1964, Title IX of the Education Act Amendments of 1972, and California Education Code Sections 210 through 214, inclusive.

The Assistant Superintendent/Vice President for Human Resource Services is responsible for administering this policy. All questions, concerns, and complaints regarding sexual harassment should be addressed to this position.

Student Behavior Rules and Regulations

Students at Palomar College are responsible for regulating their own conduct and for respecting the rights and privileges of others. Palomar students are expected to conduct themselves in a manner compatible with the function of the College as an educational institution, and respect and obey all civil and criminal laws. Failure to abide by the standards as set forth by Palomar College is cause for disciplinary action.

Guidelines for student conduct are set forth in the California Education Code, California Administrative Code Title 5, policies of the Board of Trustees, and all civil and criminal codes.

In compliance with California Education Code Section 66300, 72282, and 72292, and in keeping with the above, regulations have been established to effectively and efficiently provide for the approved educational programs, approved student activities, and community services. For further information, contact the Office of Student Affairs, room SU-202.

Student Conduct Code

The complete Student Conduct Code is available in the Office of Student Affairs, room SU-201.

I. Standards of Conduct

Students enrolled at Palomar College are responsible for their conduct and for respecting the rights and privileges of others. Palomar College will conduct themselves in a manner compatible with the good order and function of the College. We invite and encourage all students to familiarize themselves with the Palomar College Statement on Academic Integrity and to strive to act in a manner consistent with the principles addressed within the statement. Students are also expected to obey all civil and criminal laws. Whenever it has been determined that "good cause" exists for student discipline, the appropriate official of the College shall notify the student of action to be taken. Examples of "good cause" include, but are not limited to the following:

- A. Students are expected to avoid any type of dishonesty, including, but not limited to cheating, plagiarism, forgery, fabrication or counterfeiting documents, furnishing false information to the College, alteration or misuse of college documents or records, duplication of assignments, or aiding another in an act of dishonesty.

As noted in the Statement of Academic Integrity, honesty is of utmost importance in all endeavors related to the College. A detailed discussion of academic dishonesty and related consequences are addressed in Section III.

- B. Disturbance of the peace, which includes, but is not limited to, behavior which contributes to the obstruction or disruption of teaching, athletic events, meetings, or other college activities on or at any District property or facility, including but not limited to, classrooms, library, athletic field, locker room, bookstore, food service facility, student union, game room, any college office, parking lot, or roadway.
- C. Assault, battery, or any threat of force or violence, physical or verbal, upon a student, college personnel, or visitor.

- D. Theft of, or damage to, or threat of damage to, property of the District or an employee, student, or visitor to a District facility.
- E. Unauthorized entry into, or unauthorized use of District facilities, supplies, or equipment.
- F. Violations of District policies and regulations, including, but not limited to, regulations and policies related to parking, computer, telecommunications, campus vehicles, and any and all other District equipment, and policies and regulations related to student organizations and student and visitor symbolic expression.
- G. Unlawful use, possession, sale, or distribution of a "controlled substance" as the term is defined by the California Health and Safety Code, Section 11007, and that which is listed in any schedule in Sections 11054, 11056, 11057, or 11058; while on District premises or at any District sponsored activity. Attendance at any College function or event, or activity sponsored by the College while under the influence of a controlled substance.
- H. Disorderly conduct, including, but not limited to, inappropriate, disrespectful, insulting, and/or obscene language, alcoholic intoxication, lewd, indecent, or obscene conduct.
- I. Possession and/or consumption of any alcoholic beverage on any District property or in any District vehicle.
- J. Disruptive behavior, profanity or vulgarity, or defiance at faculty or staff, including but not limited to, cafeteria and bookstore employees, counselors and financial aid staff, campus police employees, other students or visitors to the college.
- K. Defiance or abuse of personnel, including but not limited to, faculty, administrators, counselors, librarians, office staff, athletic coaches, club advisors, or campus police.
- L. Possession of any type of object that can be reasonably assumed to be a weapon or used as a weapon (as defined by the California Penal Code), on or at any District facility, or District sponsored event or activity.
- M. Willful or persistent smoking or use of tobacco products on College premises where smoking and use of tobacco products has been prohibited by regulations of the Governing Board of the College.
- N. Misuse of District computers, telephone, or telecommunications devices.

It is the expectation of Palomar College that minor children will be under the constant supervision of parents or guardians (notwithstanding those minor children enrolled in Palomar College classes and programs) and that said parents or guardians are responsible for assuring appropriate behavior of minor children. Parents or guardians will be held responsible when the behavior of minor children constitutes a violation of the Palomar College Code of Conduct and these parents or guardians will be directed to remove the minor children from District facilities (classrooms, libraries, food services, operations, athletic events, public areas, etc.) should violations occur.

At the discretion of the professor, minor children shall be allowed to accompany parents or guardians to a class in which the parent or guardian is enrolled.

II. Consequences for Violations of the Student Code of Conduct

This section provides information regarding the possible consequences for violations of the Palomar College Student Code of Conduct beyond incidents of academic dishonest.

- A. **WARNING:** Oral or written notice that a student's conduct is a specific instance does not meet College standards and that continued misconduct may result in further and more severe disciplinary action.
 - B. **REPRIMAND:** A censure for violation of specific rules of conduct.
 - C. **REMOVAL BY THE INSTRUCTOR:** Denial of the right to attend a particular class for a specific period of time not to exceed two (2) class meetings (regardless of the length of class meeting). This consequence is available to all instructors of record and can be utilized whenever, in the judgment of the instructor, good cause exists for its use. All suspensions of this type are at the discretion of the instructor and cannot be appealed.
- Instructors must notify the Office of the District of Student Affairs when this sanction is utilized so that accurate records can be maintained and repeat offenders will be identified. (Ca. Ed. Code Sec. 76032)
- D. **PROBATION:** Notice to the student found in violation of the Code of Conduct may continue to be enrolled and participate in extra or co-curricular activities under stated conditions. Further incidents of inappropriate behavior shall be cause for further and more severe disciplinary action.
 - E. **SUSPENSION:** A revocation of student status for a fixed period of time. May be limited to a specific program, course of study, or activity, or applied to all student programs and activities. A suspension may include a prohibition from visiting any College facility for the duration of the suspension. Generally, a suspended student must meet with the Director of Student Affairs following the period of suspension and prior to re-enrolling in courses.
 - F. **EXPULSION:** A determination that a student should be removed from the College and not allowed to return may also include a prohibition from visiting any District facility.

III. Academic Honesty Guidelines

Honesty in all aspects of academic endeavor is imperative. Accordingly, students are expected to avoid dishonesty in all of their behavior related to their experience at Palomar College. Following are examples of behavior deemed to be dishonest:

- A. **Plagiarism**, the representation of the ideas or words of another as your own. Below are some examples of plagiarism:
 1. Copying someone else's sentences or phrases (whether published or not), either verbatim or paraphrases, and presenting them as your original work.
 2. Using another author's ideas, outline of information, or method of presentation without acknowledgement of the source.
 3. Re-writing a research paper that incorporates material from a paper written by another person.
 4. Submitting a research paper as your own work that was borrowed, purchased, or obtained in any other manner from another student or any other source.

- B. **Cheating**, offering or receiving unauthorized assistance on an assignment or examination. The following are examples of cheating:
1. Notes taken into an examination without the permission of the instructor.
 2. Examination questions recorded and passed on by one person to another.
 3. Any type of assistance, oral or written, given by one student to another during a project or examination without the approval of the instructor.
 4. Alteration of a graded paper or examination resubmitted for reconsideration of grade or additional credit.
 5. Use of any electronic device (calculator, tape recorder, or computer) during an examination unless permitted by the instructor.
 6. Alteration of laboratory experience or results.
 7. Submission of any work written or created by someone other than yourself as though it was your own work product.
 8. Obtaining, or assisting another person to obtain, or being in possession of a test, assignment, exam, without the approval of the instructor.
- C. **Fabrication**—includes presentation to a class or the inclusion in an assignment or examination of any data or other information manufactured by the student or gathered in a fraudulent manner.
- D. **Duplication of Assignments**—Students may not use a research paper, speech, or other project from one course to satisfy the requirements of a second course without obtaining permission of the instructor of the most recent course for which the assignment is going to be used.
- E. **Aiding in Dishonesty**—A student is aiding in dishonesty when he or she makes material, information, or opportunity available for another student to utilize in a dishonest manner.

IV. Consequence of Academic Dishonesty

All incidents of academic dishonesty should be reported to the office of the Director of Student Affairs. This office maintains a record of these incidents and attempts to track for repeat offenders. Additionally, the Director of Student Affairs should be considered a resource person for students and staff desiring additional information or assistance with this policy.

V. Consequences for Violations of the Student Code of Conduct

This section provides information regarding the possible consequences for violations of the Palomar College Student Code of Conduct beyond incidents of academic dishonesty.

- A. **WARNING**: Oral or written notice that a student's conduct in a specific instance does not meet College standards and that continued misconduct may result in further and more severe disciplinary action.
- B. **REPRIMAND**: A censure for violation of specific rules of conduct.
- C. **REMOVAL BY THE INSTRUCTOR**: Denial of the right to attend a particular class for a specific period of time not to exceed two (2) class meetings (regardless of the length of a class meeting). This consequence is available to all instructors of record and can be utilized whenever, in the judgment of the instructor, good cause exists for its use. All suspensions of this type are at the discretion of the instructor and cannot be appealed.

Instructors must notify the Office of the Director of Student Affairs when this sanction is utilized so that accurate records can be maintained and repeat offenders will be identified. (Ca. Ed. Code Sec. 76032).

- D. **PROBATION**: Notice the student found in violation of the Code of Conduct may continue to be enrolled and participate in extra or co-curricular activities under stated conditions. Further incidents of inappropriate behavior shall be cause for further and more severe disciplinary action.
- E. **RESTITUTION**: Reimbursement for, or service and repair of, District property that has been damaged, misused, or misappropriated. Restitution may be imposed in combination with any other disciplinary action.
- F. **COMMUNITY SERVICE**: May be performed by a student as a consequence for violations of the Code of Conduct or may be assigned in combination with any other consequence enumerated within this section. Community service may be assigned in lieu of reimbursement articulated in subsection "E" above.
- G. **SUSPENSION**: Denial of College privileges, including one or more of the following:
1. The right to be on the premises of any District facility.
 2. Exclusion from one or more classes or activities (sports, student government, cheerleading, field trips, drama, forensics, etc.) for a period up to ten (10) days of instruction.
 3. Exclusion from one or more classes or activities for the remainder of the semester.
 4. Exclusion from all classes and activities of the College for one or more terms/semesters.
- H. **EXPULSION**: Expulsion from the College by the Governing Board for a definite period of time and loss of all College privileges, including District employment and the privilege of entering any of the District's facilities except by written authorization from the Office of the Superintendent/President. Readmission is contingent upon the student's application to, and approval of, the Governing Board.

VI. Suspension

Suspension by a college instructor for good cause from class for the day of suspension, and the following class meeting. Instructor's decision is final, and may not be appealed.

VII. Appeals

Only Long-Term Suspension and Expulsion are subject to the hearing and appeal procedures. These procedures are on file in the Office of Student Affairs, SU-21.

Student Grievance Policy

It is the policy of the Palomar Community College District to authorize students to start grievance procedures when the student believes that he/she has been subject to unjust action, or the denial of rights as published in District regulations, state law, or federal laws. Copies of the Student Grievance Policy and Procedures are available in the Office of Student Affairs, SU-201.

Students' Rights and Privacy of Student Records

Pursuant to CAC Title 5, Section 54606 and subsequent sections, you may request an opportunity to inspect any and all official school records, files, and data related to the student. If information in the file is inaccurate, misleading, or

inappropriate, the student may request removal of the information, or include a statement disputing the material that he/she challenges.

Other provisions of the law restrict the people who have access to the information in student records. School personnel with legitimate educational interests, schools of intended enrollment, specified federal and state educational administrators, or those who provide financial aid are entitled to access without the student's consent. Access may also be obtained without your consent pursuant to court order. Parents of minors do have access. Parents of non-minor students do not have access, except when written permission is received from the student.

De conformidad con las leyes federales, cualquier estudiante puede pedir toda copia de su informacion personal (records). Si hay errores en esta informacion, el estudiante puede pedir que estos errores sean corregidos o que la informacion sea removida. El estudiante tambien puede incluir una explicacion disputando la informacion incorrecta.

Otras provisiones de la ley ponen limites a personas que tengan acceso a esta informacion personal del estudiante. En ciertos casos, hay personas en instituciones educativas (colegios, universidades, escuelas, etc.) que tienen el derecho legal de inspeccionar esta informacion personal del estudiante. Cuando hay una orden legal de la corte, esta informacion personal del estudiante puede ser inspeccionada. Los padres de personas menores de edad tambien pueden inspeccionar esta informacion. Los padres de personas mayores de edad necesitan tener permiso escrito del estudiante para poder inspeccionar esta informacion confidencial.

Directory information is maintained which includes name, address, telephone number, date of birth, email address, and class schedule information. The College will provide information to:

1. The National Student Clearinghouse for purposes of enrollment verification, degree verifications, and data matching services (for transfer follow-up research)
2. Colleges, universities, or government agencies to promote outreach to students and to enhance transfer
3. The California Student Aid Commission to facilitate the award of financial aid
4. The California Community College Chancellor's Office for research and analysis purposes
5. Prospective employers upon your request. Dates of attendance, program of study, and the degree granted will be provided to an employer only upon request.
6. For law enforcement purposes.

Directory information will not be sold, used for commercial purposes, disclosed to the public, or given to government agencies for the purpose of making benefits determinations (other than for financial aid). If you do not want the College to provide any directory information without your written consent, please notify the Records Office, in writing within thirty (30) days of the start of each semester. If you activate your student email account, it will be displayed in a public electronic address book.

Students who are applying for or receiving student financial aid must disclose their social security number. Also, any student who wants a tuition tax credit form - 1098T to claim income tax credit for tuition and fees on their federal income tax return must provide the social security number.

Todo estudiante que someta una solicitud para recibir ayuda financiera del gobierno federal tiene que usar su numero de seguro social. Tambien, cada estudiante que quiera credito por los gastos de ensenanza en sus impuestos federales tiene que

someter al colegio su numero de seguro social.

All health information is confidential, and is not revealed to any person or persons, except those persons in Health Services directly connected with treatment of the student. Instructors, however, will be notified if a student has a health condition that may result in losing consciousness.

Regulations and procedures regarding student records are available in the Records Office, room SSC-54.

Student Right To Know

As a consumer, you have a right to know about your chances of college success. "Student Right-To-Know" (SRTK) refers to a Federally-mandated public disclosure of a college's Completion Rate and Transfer Rate. The intent of SRTK is to provide to the consumer, a statistic of comparable effectiveness that they can use in the determination of college choice.

SRTK is a "cohort" study; that is, a group of students who are first-time freshmen who are enrolled full-time and are degree-seeking is identified in a fall term and their outcomes are measured over a period of time. The outcomes that the two SRTK rates measure are Completion (the total number of students in the cohort who earn either a degree, a certificate, or who successfully completed a two-year-equivalent transfer-preparatory program) and Transfer (the total number of cohort non-completers who were identified as having enrolled in another institution). The tracking period of the cohorts is three (3) years, at which time the SRTK rates are calculated and made public. See <http://srtk.cccco.edu/index.asp/> for further information, as well as for specific college data.



Section 5 – Academic Regulations and Standards

Academic Policies

Academic Renewal Regulations

Palomar College is committed to meeting the educational needs of all its District citizens. Open entry encourages students of varied educational backgrounds to pursue their individual goals. Palomar's commitment to all students increases the likelihood of enrolling those who have failed in the past but who have shown their readiness to try again. To reduce the negative impact of past academic failure and to facilitate fair and equitable treatment of all students in pursuit of their academic goals, Palomar College supports Academic Renewal.

A student may request that thirty (30) units of previous course work attempted at Palomar College or any other institution be excluded when computing the grade point average (GPA). Course work to be disregarded must include the entire semester. Subject, but not unit, credit will be allowed for work completed satisfactorily (A, B, C or CR) during disregarded terms for A.A. degree Competency and Certificate requirements only. Academic Renewal is not allowed if course work to be disregarded has previously been used to fulfill degree, certificate, or transfer certification requirements.

Current and potential financial aid students are advised that all units attempted will count in the total units attempted limit for financial aid eligibility. Academic renewal does not eliminate units for financial aid purposes.

Procedure

If the following conditions are met, Palomar College may disregard from all consideration associated with requirements for the Associate in Arts degree, Certificate of Achievement and General Education certification up to a maximum of thirty (30) semester units of course work taken at any college. These conditions are:

1. The student completes a Petition for Academic Renewal with a counselor. Forms are available from the Counseling or Records Offices. The student submits the Petition to the Records Office.
2. The majority of course work in the term(s) under consideration must be substandard (FW, F, D, NC) and not representative of present scholastic ability and level of performance, the total GPA of which is less than 2.0.
3. Three years must have passed since attempting the course work to be excluded from GPA calculation.
4. The student must have completed 24 semester units since the term(s) to be disregarded, of which at least 15 must have been earned at Palomar. The remaining 9 units may be completed at another regionally accredited postsecondary institution.
5. The student must have a 2.0 GPA since the time of attempting the course work to be excluded.
6. The petition will be reviewed by the Records Office for compliance with policy. The student will be notified by mail of approval or denial of request.
7. The student agrees that ALL units attempted during the semester to be excluded, even satisfactory units, are to be disregarded.
8. Academic renewal granted by Palomar College does not guarantee that other institutions will approve such action. This determination will be made by the respective transfer institution.

NOTE: Students who have attempted more than thirty (30) units in the two terms to be disregarded may submit a Student Petition to the Academic Review Committee for consideration.

Annotation of Record/Academic Renewal

It is important to understand that all course work will remain legible on the student's permanent record (transcript), ensuring a true and complete academic history. However, the student's permanent record will be annotated so that it is readily evident to all users of the record that the units, even if satisfactory, are to be disregarded and may not apply to certificate, degree or general education requirements.

Attendance

Student Responsibilities

The primary responsibility for class attendance and maintaining an accurate registration record rests with the student. Consequently, each student must process all adds or drops to their class schedule and is held responsible for the updating of their Official Study Schedule. To be officially recorded, adds and drops must be submitted to the Admissions Office by the appropriate deadlines (check deadline dates in the Class Schedule).

Students are expected to attend all sessions of a class in which they are enrolled. Anticipated absences should be reported to instructors in advance in order to complete assigned work by due dates. All other absences should be reported to instructors immediately upon returning to class and any missed course work should be made up. If an emergency requires a long absence and the instructor cannot be reached, students should contact the instructor's department/office.

Failure to attend classes can result in an F or FW grade unless the student submits a drop to the Admissions Office by the appropriate deadline. The withdrawal dates and deadlines are listed in the class schedule each semester.

Faculty Responsibilities

Each faculty member is responsible for informing students in writing of the course content and grading system for each class within the first two class meetings. The instructor has the responsibility for maintaining accurate attendance records in accordance with established procedures.

Prior to the first census, instructors must drop any student identified as a no show (students who registered, but never attended class). An instructor may elect to drop a student for the following reasons: 1) excessive absences, normally defined as more than the number of times the class meets per week; 2) failure to take examinations; 3) failure to complete class assignments.

Auditing a Class

- Permission to audit a class is granted at the discretion of the instructor and with the instructor's and Dean's signed permission.
- An audit student shall not be permitted to change his/her enrollment in the course to receive credit.
- With the instructor's and Dean's signed permission, a credit student may switch his/her enrollment to audit status provided the change is completed prior to the end of the fourth week of class for a full semester course or prior to 30% of a short-term course.
- With the instructor's and Dean's signed permission, a student may enroll in a course for audit at any time during a semester if he/she has not enrolled in that course for credit during the same semester.
- No student will be allowed to register in audit status prior to the first day of class. The first day of class refers to the actual first class meeting.
- Credit students have priority over auditors. If a class closes after an auditor has been admitted, the auditor may be asked to leave to make room for the credit student. Instructor discretion is strongly recommended.

- If a student taking 10 or more units for credit is auditing a class and drops below the 10 unit level, the \$15.00 per unit audit fee will be assessed.

Basic Skills Course Limitations

Basic skills or pre-collegiate courses are designed to prepare students for college-level work. Students may be required to enroll in certain basic skills courses if the assessment process indicates they will benefit by this special preparation for college-level courses. A total of 30 units of courses numbered from 1 - 49 are allowed.

Any student who completes a total of 30 units in any combination will be notified and referred to a counselor for educational planning or exceptions to the limits. Basic skills courses may not be used to satisfy general education requirements for an associate degree.

Students who are financial aid recipients are reminded that only 30 units of remedial course work are excluded from the established unit limit for financial aid eligibility.

The following is a list of basic skills courses that are excluded from the established unit limit for financial aid eligibility: English 10; Mathematics 10, 15; Reading 5, 10, 11.

Correct Use of English

Clear and correct use of English, both on tests and on written assignments, is expected of all students.

All students, especially those planning to transfer to a four-year institution, are urged to take a course in English composition as soon as possible.

Course Repetition

Students may repeat a course under the following conditions:

- The course has been identified in the Catalog as repeatable, and the student has not attempted a course more times than allowed.
- The course is being repeated to alleviate a D, F, FW, or NC grade (one repeat only allowed).
- The student is repeating a course after a lapse of three years by approved petition of the Director of Enrollment Services.
- The student is repeating a course after a lapse of less than three years by approved petition of the Director of Enrollment Services based on the previous grade being, at least in part, the result of extenuating circumstances. Extenuating circumstances are verified cases of accidents, illness, or other circumstances beyond the control of the student.
- To meet legally mandated training requirements as a condition of continued employment. No limitation on repetitions; however credit limitations may apply.
- Special classes for students with disabilities may be repeated beyond the stipulated number if appropriate as a reasonable accommodation for a disability.

Current and potential financial aid students are advised that financial aid will not fund a repeat course. However, any course repeated, whether or not financial aid funds were received, will be counted in the total units attempted limit for financial aid eligibility.

Petitions for Course Repetition are available in the Evaluations Office. Petitions must be approved before enrolling in the class(es) to be repeated. The Credit/No Credit grading option is not available to students who received a D, F, or FW grade on the first attempt. Once the course is repeated, a Grade Adjustment form should be submitted to the Records Office to update the student's records and grade point average.

Students who do not comply with the above regulations will be administratively withdrawn from the repeated class(es). The student will be notified by mail and should arrange to register for alternative classes immediately.

Annotation of Record/Course Repetition

It is important to understand that the student's permanent record (transcript) will be annotated in such a manner that all course work will remain legible ensuring a true and complete academic history. Transcripts will be annotated as follows:

1. Courses with substandard grades may be repeated only once in order to raise the grade and grade points. The units attempted, grade, and grade points of the first attempt will be subtracted from the totals for that semester and will be listed on the record with a code which denotes repetition. In no case will duplicate units be allowed.
2. For students repeating a course in which a standard grade was received, the first attempt will be the one used in the calculation of the grade point average. The second attempt (even if better) will be subtracted from the totals and will be listed on the record with a code which denotes repetition. In no case will duplicate units be allowed.
3. For students attempting a course for the third or more time in which they have received substandard grades, the first attempt will be subtracted from the totals. All subsequent attempts will count in the calculation of the grade point average. In no case will duplicate units be allowed.

Credit by Examination

In order to permit students to demonstrate that they have met the objectives of a course through experience in the work place, foreign language proficiency, or some other process outside the conventional academic setting, students may earn credit by receiving a passing grade on an examination administered by the appropriate instructional department/program. The completion of Credit by Examination may require the demonstration of other skills or the completion of assignments in addition to an examination.

Not all courses listed in the catalog may be eligible for Credit by Examination. The determination of which courses in a discipline may be taken by examination is made by that department/program. The Department Chair/Director will determine whether or not a student requesting Credit by Examination is sufficiently well prepared to warrant being given this opportunity. This determination is based upon a review of previous course work or experience.

The following rules apply to earning Credit by Examination:

- The examination must be reviewed and approved by the Department Chair/Director prior to its administration. Completed examinations must remain on file in the department/program for three years.
- A maximum of fifteen (15) units earned at Palomar College or elsewhere through Credit by Examination may be applied towards completing an Associate in Arts degree, general education transfer certification or vocational certificate program at Palomar College. (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.)
- The student's transcript will clearly identify all courses attempted through Credit by Examination. Courses are graded on a Credit/No Credit basis. The student must earn the equivalent of a C or better to earn a grade of Credit.
- Credit by Examination may not be attempted for a course more than once.

- Attempting Credit by Examination for a lower-level course when a student has previously passed a more advanced course requires approval from the Department Chair/Director.
- Courses in Nursing Education may be attempted through Credit by Exam only under the rules of the Board of Registered Nursing.
- A student must be currently enrolled in at least one credit course at Palomar, excluding the attempted Credit by Exam, and may not be on probation or dismissal status.
- If no units are completed with a grade other than W, the Credit by Exam petition will not be processed. No fees will be refunded.
- The student must pay the same fees or non-resident tuition required of a regularly scheduled course to take Credit by Examination.
- The process of Credit by Exam must be completed prior to the end of the current semester or session. Failure to complete the process within that time period will result in a grade of No Credit for the course.
- Credit by Examination will only be recorded on the student's permanent record if departmental and institutional procedure has been followed.

Students wishing to attempt a course via Credit by Examination are encouraged to informally discuss the matter with the Department Chair/Director and instructor prior to initiating the formal process.

The process for receiving Credit by Examination is as follows:

- The student obtains a petition from the Admissions and Records Office and completes the required information.
- The Records Office performs the eligibility and residence clearances (3-5 business day turn-around time required).
- The student meets with the Department Chair/Director who reviews the petition, checking to ensure that the eligibility clearance has been completed and that the course is appropriate for Credit by Examination.
- If the Department Chair/Director finds the request appropriate, he/she signs the petition and assigns an instructor to administer the examination.
- The student makes arrangements with that instructor to take the examination and obtains the instructor's signature on the petition. The examination must be reviewed and approved by the Department Chair/Director prior to its administration.
- The student is directed to the Cashier's Office for payment of fees and clearance. Tuition and/or enrollment fees must be paid after department approval is granted and before the examination is administered.
- The instructor administers the examination and evaluates any other required assignments.
- The instructor records the grade on the Credit by Examination petition, attaches the completed examination materials to the petition and forwards these to the Department Chair/Director.
- The Department Chair/Director reviews and signs the petition, and forwards the petition to the Instruction Office for class number assignment. The Instruction Office then forwards the petition to the Records Office for posting. Completed examination materials must remain on file in the department/program for three years.

The process of Credit by Exam must be completed prior to the end of the current semester or session. Failure to complete the process within that time period will result in a grade of No Credit for the course.

Credit/No-Credit Grading

The decision to change to credit/no-credit grading must be made by the end of the fourth week of a full semester course

or by the first 30% of a short-term course, after which no other evaluative grade may be given. Application forms are available online or in the Admissions Office. The student must submit the form to the Admissions Office.

A grade of CR is earned for coursework equal to a grade of "C" or better. A grade of NC is earned for coursework equal to a grade of "D" or "F". Neither CR nor NC is used in computing the grade point average; however, CR/NC units appear on the transcript of record.

A student may reverse his/her enrollment from credit/no credit status to receive an evaluative grade, provided the reversal is completed prior to the end of the fourth week of a full semester course, or prior to 30% of a short-term course.

Units attempted for which NC is recorded shall be considered in probation and dismissal procedures. Students may not repeat on a CR/NC basis a course previously taken for a letter grade. English 100, 202, and 203 may not be taken on a CR/NC basis. Students are advised that four-year institutions may limit the number of CR units acceptable for transfer.

Critical Thinking Statement

The major role of education in America is to produce an individual who can contribute to society as a well-informed member of a democracy. Competence in critical thinking empowers the college student with the ability to distinguish opinion from fact and belief from knowledge. Evaluative skills learned through elementary inductive and deductive reasoning have applications in problem solving in all aspects of everyday existence. Therefore, all examinations, assignments and activities at Palomar College should reflect academic rigor by requiring critical thinking on the part of the student.

Grading and Transcripts

Student Responsibility

Each student is responsible for his/her registration of classes and for attending classes. Furthermore, each student is responsible for following the rules and regulations in this catalog. The College is not liable if the student fails to read and understand the rules.

Grading System

Grades are assigned by instructors based on class work and tests. The grades assigned are as follows:

Evaluative Grades

Symbol	Definition	Grade Point Value
A	Excellent	4
B	Good	3
C	Satisfactory	2
D	Passing, less than satisfactory	1
F	Failing	0
FW	*Failing for unofficial withdrawal	0
CR	Credit (At least satisfactory - A, B, C grades. Units passed not counted in GPA.)	
NC	No credit (Less than satisfactory - D or F grades. Units not counted in GPA.)	

*For a student who has ceased to participate in a course after the last day to officially drop or withdraw without having achieved a passing grade. The FW grade shall be used in determining academic standing.

Non-evaluative Grades

Symbol	Definition
I	Incomplete: Incomplete academic work for unforeseeable, emergency and justifiable reasons at

the end of the term.

The condition for the removal of the "I" is stated on the Record of Incomplete ("I") Grade form. The "I" is not used in calculating units attempted or for grade points. A final grade shall be assigned when the stipulated work has been completed and evaluated, or when the time limit for completing the work has expired.

The "I" must be made up no later than one year following the end of the term in which it was assigned.

IP In Progress: The IP is used only in those courses which extend beyond the normal end of an academic term. It indicates that work is "in progress," but that assignment of an evaluative grade must await its completion.

The IP symbol remains on the student record in order to satisfy enrollment documentation. The appropriate evaluative grade and unit credit shall be assigned and will appear in the student's record for the term in which the course is completed. If a student receives an IP in an open-entry, open-exit course and does not re-enroll in the course, or fails to complete the course in the subsequent term, an evaluative grade must be assigned.

RD Report Delayed: The RD may be assigned only by the Records Office. It is to be used when there is a delay in reporting the grade of a student due to circumstances beyond the control of either the student or the Records Office. It is a temporary notation which will be replaced by a permanent symbol as soon as possible. An RD is not used in calculating the grade point average.

W Withdrawal: The W will not be used in calculating grade point averages, but excessive W's will be used as factors in probation and dismissal procedures.

Full Semester Courses: No notation (W or any other grade) is made on the student record for withdrawals during the first four weeks of a course.

Withdrawal between the fourth and eighth weeks is at the student's discretion, and will result in a W grade recorded on the student's permanent record.

Withdrawal after the eighth week is not permitted. An evaluative (A, B, C, D, F, FW) or Incomplete (I) grade will be assigned. Students who have verifiable extenuating circumstances may petition to withdraw.

Short Term (less than 17 weeks) Courses:

No notation (W or any other grade) is made on the student record for withdrawals during the first 30% of the course.

Withdrawal between 30% and 50% of a course is at the student's discretion, and will result in a W grade recorded on the student's permanent record.

Withdrawal after 50% of a course is not permitted. An evaluative (A, B, C, D, F, FW) or Incomplete (I) grade will be assigned. Students who have extenuating circumstances may petition to withdraw.

MW Military Withdrawal: Members of an active or reserve military service who receive orders compelling a withdrawal from courses will be permitted withdrawal at any time during the semester. Upon verification of such orders, the grade

symbol MW will be assigned after the "no notation" period. The MW will not be counted in progress probation or dismissal calculations and will not have any adverse effect on the student academic record or enrollment status. Upon petition, the student will also receive a refund of the entire enrollment fee.

Conditions for Petition to Withdraw

Effective with Fall 2002, only students who have received an FW grade are eligible to petition for a withdrawal. Students who have verifiable extenuating circumstances may petition for an exception to withdraw from a class after the eighth week of a full semester course, or 50% of a short-term course. The student may petition the Director of Enrollment Services for authorization to receive a withdrawal (W) in the following manner:

- A formal petition must be submitted to the Director of Enrollment Services by the student, or the student's representative.
- Proof of the extenuating circumstances being cited as reasons for withdrawal, or unsuccessful course completion, must be submitted.
- The instructor of each course in question must be consulted. In the event the instructor of record cannot be contacted, or is unavailable, the department chair will act on his/her behalf.

Palomar College defines extenuating circumstances as serious and compelling reasons which are limited to the following:

- Illness, hospitalization, or medical reasons
- Employment
- Relocation
- Illness or death of a family member or loved one
- Incarceration

Grade Changes

All grades are final in the absence of mistake, fraud, bad faith, or incompetency (Title 5, 51308). No grade that has been placed in a student's record may be changed unless the instructor submits a Grade Change Form to the Records Office stating the reason for the change as listed above.

All changes or modifications to a student's record must be requested no later than one year from the semester in question. Registration records are maintained for a three-year period only.

Grades

Final grades are recorded on the student's permanent record at the end of each academic term. Grades are available as soon as the instructor submits the roster and the Records Office posts it, usually about two weeks after the end of the class. Grades may be accessed online through Student eServices. The college web address is <http://www.palomar.edu>.

Academic Achievement

Dean's List

A student's name may be placed on the Dean's List if the student completes in one semester at Palomar College a total of twelve (12) units with a GPA of at least 3.5 with no grade of D, F, or FW. Credit/no-credit classes are not considered as a part of the 12 units.

Phi Theta Kappa Honor Society

Phi Theta Kappa is an international honor society for two-year institutions, and the sister to the four-year institution's Phi Beta Kappa. The goal of Phi Theta Kappa is to recognize individual talents, needs, and goals.

Initial membership is awarded to those students who have completed a minimum of twelve (12) semester units at

Palomar College with a grade point average of 3.5 or better. To sustain membership each student must maintain standards described in the Phi Theta Kappa Omega Rho Chapter Constitution and Bylaws, available in the Student Affairs Office, SU-201.

Students interested in becoming a member of Phi Theta Kappa should contact the Student Affairs Office, SU-201.

Probation, Dismissal, and Reinstatement

It is the intention of the Palomar Community College District to encourage matriculating students to make satisfactory academic progress toward their individual educational goals. Students taking courses for credit should do so with the intention of completing the course or courses with a passing grade. Students who do not make satisfactory progress are subject to probation or dismissal in accordance with established District procedures.

Summer session grades will count toward earning probation, removal from probation, or possible dismissal.

Probation

Academic Probation

A student who has attempted at least 12 semester units at Palomar College is placed on Academic Probation if the student has earned a grade point average below 2.0 in all graded units attempted at Palomar College.

Any student on academic probation whose semester grade point average equals or exceeds 2.0, but whose overall grade point average falls below 2.0, shall be continued on academic probation.

Progress Probation

A student who has attempted at least 12 semester units is placed on Progress Probation when the percentage of all units in which a student has enrolled, and for which entries of W, I, or NC are recorded, reaches or exceeds fifty (50) percent.

Any student on progress probation whose semester work indicates fewer than fifty (50) percent units of W, I, or NC, but whose overall records show fifty (50) percent or more units of W, I, or NC shall be continued on progress probation.

A student on probation is encouraged to meet with a Counselor to set up an Educational Plan, and is expected to participate in prescribed strategies and/or support services. The student will not be allowed to participate on any Palomar College team, in student government, in the Inter-Club Council, or serve as an officer in any campus organization. Probation status will be recorded on the student's permanent record.

Removal from Probation

A student on Academic Probation shall be removed from probation when the student's overall grade point average at Palomar College has improved to 2.0 or higher.

A student on Progress Probation shall be removed from probation when the percentage of units with entries of W, I, or NC drops below fifty (50) percent.

Dismissal

Academic Dismissal

A student on Academic Probation shall be subject to dismissal when the student earns an overall grade point average of less than 2.0 in all units attempted in three semesters/sessions.

Progress Dismissal

A student on Progress Probation shall be subject to dismissal when the overall percentage of units with entries of W, I, or NC reaches or exceeds fifty (50) percent in three semesters/sessions.

sessions.

A student on dismissal status is ineligible to participate in any Palomar College classes or student activities until the requirements for reinstatement are fulfilled. Dismissal status will be recorded on the student's permanent record.

Reinstatement

A student who has been dismissed may be reinstated when the student (a) does not attend for one semester, and (b) meets with a Palomar College counselor to determine whether the reasons that led to dismissal have been corrected sufficiently to enable improved performance.

Students who believe their dismissal status should be put aside must immediately petition the Academic Review Committee. Meet with a counselor to initiate the petition process.

Financial Aid Disqualification/Ineligibility

Current financial aid students will be disqualified from receiving financial aid if they fail to meet the Financial Aid Satisfactory Academic Progress Policy established by the Financial Aid & Scholarships Office in compliance with federal regulations. In addition, financial aid students will be disqualified automatically from receiving further financial aid when placed on Academic or Progress Probation by the college.

Potential financial aid students who are placed on Academic or Progress Probation by the college will be automatically ineligible for financial aid.

Students are advised that they may submit a Petition for Financial Aid to the Financial Aid & Scholarships Office. More detailed information on the Financial Aid Satisfactory Academic Progress Policy is also available.

Veterans Disqualification

For a veteran student, if the cause for probation has not been removed at the end of two consecutive semesters on academic or lack-of-progress probation, the Veterans' Services Office is required to notify the Department of Veterans Affairs (DVA). Please check with the Veterans' Services Office for details.

Official Transcript and Verifications of Enrollment

In the interest of the student who desires to continue studies elsewhere, upon request the College issues an official transcript. The transcript is a duly certified record of all work completed or undertaken by the student at Palomar College, which is forwarded directly to another institution designated by the student.

The first two transcripts and/or verifications of past semester enrollment ever issued to/for the student are furnished free of charge upon request. Additional transcripts and/or verifications may be obtained for a fee of three dollars (\$3.00) each, payable in advance to Palomar College. Rush service for transcripts and/or verifications of enrollment is available for an additional fee of \$5.00 each. Rush requests are processed within two (2) business days of receipt of written request for both pick-up and mail service. If requesting rush transcripts and/or verifications by mail, please write "Rush" on the outside of the envelope.

High school and college transcripts which are submitted by other institutions to the Records Office become the property of Palomar College and are not forwarded to other institutions.

Transcripts are sent only upon the written request of the student. Five to seven (5-7) business days are generally required for normal processing of transcripts. We cannot insure delivery of transcripts to the recipient. You will be charged for each transcript processed according to our records.

Transfer Credits from Other Sources

Credit from Other Colleges

It is the policy of Palomar College to grant credit for most courses taken at regionally accredited (Associations of Colleges and Schools) institutions of higher learning. Credit earned at a time when an institution was a candidate for accreditation may be accepted. Official transcripts must be on file with the Records Office. Hand-carried official copies of transcripts are accepted provided they are received in sealed envelopes.

Transfer credits from institutions using the quarter system shall be evaluated as follows: each unit of work at a quarter system is equivalent to two-thirds of a semester unit (i.e. 3 quarter units equals 2 semester units).

Non-Traditional Credit

Non-traditional credit may be used to satisfy general education requirements, elective requirements, or major course requirements. A maximum combined total of 48 non-traditional units will be granted. Palomar College will not grant non-traditional credit for non-degree applicable course work.

Advanced Placement Examinations (AP)

Palomar College grants Advanced Placement (AP) credit toward its Associate in Arts degree, and CSU and IGETC certification patterns to high school students who attain scores of 3, 4, or 5 on the Advanced Placement Examinations of the College Entrance Examination Board.

Students may earn 3 to 10 semester units of credit for each exam satisfactorily passed. See a counselor for specific information regarding the awarding of credit. Students intending to transfer to a four-year institution should consult a counselor or the individual university regarding its AP credit policy.

To receive credit, students must submit an official AP transcript to the Records Office. For information on obtaining a transcript, contact the College Board. Information is available on the web at <http://www.collegeboard.com>.

AP Exam	Score	Palomar Equivalent	CSUGE Area	IGETC Area*
Art History	3, 4, 5	ART 165, 166	C1	3A
Biology	3, 4, 5	BIOL 100	B2, B3	5 (BS)
Chemistry	3, 4, 5	CHEM 110/110L	B1, B3	5 (PS)
Computer Sci A	3, 4, 5	CSIS 220	N/A	N/A
Computer Sci AB	3, 4, 5	CSIS 221	N/A	N/A
Economics, Macro	3, 4, 5	ECON 101	D2	4B
Economics, Micro	3, 4, 5	ECON 102	D2	4B
English Lang/Comp	3, 4, 5	ENG 100	A2	1A
English Lit/Comp	3, 4, 5	ENG 100, 205	A2, C2	1A or 3B
French Language	3, 4, 5	FREN 201	C2	3B
French Literature@	5	FREN 210	C2	3B
Geography, Human	3, 4, 5	GEOG 105	D5	4E
German Language	3, 4, 5	GERM 201	C2	3B
Government, Comp	3, 4, 5	POSC 110	D8	4H
Government, U.S.	3, 4, 5	Elective, Area D	D8	N/A
History, European	3, 4, 5	HIST 105, 106	D6	3B
History, U.S.	3, 4, 5	HIST 101, 102#	D6	4F
History, World	3, 4, 5	HIST 107, 108	D6	4F
Math, Calculus AB	3, 4, 5	MATH 140	B4	2
Math, Calculus BC	3, 4, 5	MATH 140, 141	B4	2
Music Theory	3, 4, 5	MUS 105	C1	N/A
Physics B	3, 4, 5	PHYS 110	B1, B3	5 (PS)
Physics C (Mech)	3, 4, 5	PHYS 120	B1, B3	5 (PS)
Physics C (Elec/Mag)	3, 4, 5	PHYS 121	B1, B3	5 (PS)
Psychology	3, 4, 5	PSYC 100	D9	4I
Spanish Language	3, 4, 5	SPAN 201	C2	3B
Spanish Literature@	5	SPAN 210	C2	3B
Statistics	3, 4, 5	MATH 120	B4	2

* A maximum of one course may be used for each AP exam on the IGETC

@ CSU awards 6 units of credit in Area C2 for a score of 3, 4, or 5;

IGETC awards 5 units of credit in Area 3B for a score of 3, 4, or 5

Must also satisfactorily complete POSC 120 in order to fulfill the American History and Institutions Requirement

Please see a counselor for specific information regarding AP exam placement and credit awarded.

College Level Examination Program (CLEP)

Palomar College grants credit for successful completion of certain College Level Examination Program (CLEP) examinations to students who attain satisfactory scores. Credit is applied only toward the Associate in Arts degree.

Students may earn from 3 to 10 semester units of credit for each exam satisfactorily passed. See a counselor for specific information regarding the awarding of credit. Students intending to transfer to a four-year institution should consult a counselor or the individual university regarding its CLEP credit policy.

To receive credit, students must submit an official CLEP transcript to the Records Office. For information on obtaining a transcript, contact the College Board. Information is available at <http://www.collegeboard.com>.

CLEP Exam	Score	Palomar AA Credit
Accounting, Principles of +	50	Elective
Algebra, College	50	Math Comp, Area A-2
Algebra-Trigonometry, College	50	Math Comp, Area A-2
American Government @	50	Area D
American Literature	50	Area C
Analyzing/Interpreting Literature	50	Area C
Biology (without lab)	50	Area B
Business Law, Introductory +	50	Elective
Calculus	50	Math Comp, Area A-2
Chemistry (without lab)	50	Area B
Educational Psychology, Intro to +	50	Area D
English Composition, w/Essay	50	Area A-1
English Literature	50	Area C
French Lang, Level I	50	Area C
French Lang, Level II	62*	Area C
German Lang, Level I	50	Area C
German Lang, Level II	63	Area C
History of the U.S. I #	50	Area D
History of the U.S. II +	50	Area D
Human Growth/Development	50	Area D
Humanities	50	Area C
Info Systems/Computer Appl	50	Area A-2 or Area E
Macroeconomics, Principles of	50	Area D
Management, Principles of +	50	Elective
Marketing, Principles of +	50	Elective
Mathematics, College	50	Math Comp, Area A-2
Microeconomics, Principles of	50	Area D
Natural Science	50	Area B
Psychology, Introductory	50	Area D
Social Sciences/History	50	Area D
Sociology, Introductory	50	Area D
Spanish Lang, Level I	50	Area C
Spanish Lang, Level II	66*	Area C
Trigonometry	50	Math Comp, Area A-2
Western Civilization I	50	Area C
Western Civilization II	50	Area C

* The recommended credit-granting score for French and Spanish Language Level II changed in February 2003. Students should refer to the transcript for the recommended credit-granting score.

@ Combined with HIST 101 and POSC 120 will meet the AH&I requirement (grades of 'C' or better)

Combined with HIST 102 or POSC 102 will meet the AH&I requirement

^ Combined with POSC 102 will meet the AH&I requirement

+ Elective credit articulated with Palomar course work may be used for Palomar majors

Please see a counselor for specific information regarding CLEP test placement and credit awarded.

Defense Activity for Non-Traditional Education Support (DANTES)

Palomar College may award credit for successful completion of certain DANTES Subject Standardized Tests (DSST) to students who attain satisfactory scores. Credit is applied only toward the Associate in Arts degree.

The college is guided by the credit recommendations of the American Council on Education (ACE). To receive credit, students must submit an official DANTES transcript to the Records Office. For information on obtaining a transcript, contact The Chauncey Group International. Information may be found at <http://www.dantes.doded.mil> under Examination Programs.

DSST Exam	Score	Palomar AA Credit
Algebra, Fundamental College	47	Math Comp, Area A-2
Anthropology, General	47	Area D
Art of the Western World	48	Area C
Astronomy	48	Area B
Business, Intro to	46	Area E
Business Mathematics	48	Area A-2
Computing, Intro to	45	Elective
Counseling, Fundamentals of	45	Elective
Criminal Justice	49	Area D
Education, Foundations of	46	Elective
Environment and Humanity: The Race to Save the Planet	46	Area B
Ethics in America	46	Area C
Financial Accounting, Principles of	47	Elective
Geography, Human/Cultural	48	Area D
Geology, Physical	46	Area B
Health, Here's to Your	48	Area E
Human Resource Management	46	Elective
Law Enforcement, Intro to	45	Area D
Lifespan Developmental Psyc	46	Area D
Modern Middle East, Intro to	47	Area D
Organizational Behavior	48	Elective
Personal Finance	46	Area E
Physical Science I, Principles of	47	Area B
Public Speaking, Principles of	47	Area A-2
Statistics, Principles of	48	Math Comp, Area A-2
Supervision, Principles of	46	Elective
Vietnam War, A History of the	44	Area D
Western Europe Since 1945	45	Area D
World Religions, Intro to	48	Area C
Writing, Technical	46	Elective

Please see a counselor for specific information regarding DANTES/DSST exam placement and credit awarded.

International Baccalaureate Examinations (IB)

Palomar College may award International Baccalaureate Examination (IB) credit toward the Associate in Arts degree to high school students who attain a minimum score of 4 for some higher level exams. However, individual departments have the right to set scoring standards higher than the minimum and to determine course equivalency. Students intending to transfer to a four-year institution should consult a counselor or the individual university regarding its IB credit policy.

To receive credit, students must submit an official IB transcript to the Records Office.

IB Exam (Higher Level Exams only)	Score	Palomar AA Credit
Biology	5 – 7	Area B
Chemistry	4 – 7	Area B
Economics	4 – 7	Area D
English A1	5 – 7	Area A-1
French	5 – 7	Area C
German	5 – 7	Area C
History/Culture of the World	4 – 7	Area D
Latin	5 – 7	Area C
Spanish	5 – 7	Area C

Please see a counselor for specific information regarding IB exam placement and credit awarded.

Military Service Schools

Palomar College may award credit for schools and training completed while in the military. Upon completion of 6 units at Palomar College, students may submit a "Request for Evaluation of Military Service Schools" form to the Evaluations Office in SSC-40. Credit awarded is applied only toward the Associate in Arts degree, usually as elective units. Completion of Basic Training (with a minimum of 181 days of continuous active duty) will meet the Health and Physical Education requirement for the AA degree.

Students may earn up to 48 semester units for military schooling and training. Credit is awarded for work satisfactorily completed at the lower-division baccalaureate and associate degree levels only. Students intending to transfer to a four-year institution should consult with the individual university regarding its military credit policy.

To receive credit, students must submit an official transcript to the Records Office. These may include the following: Sailor/Marine American Council on Education Registry Transcript (SMART); Army and American Council on Education Registry Transcript Service (AARTS); Community College of the Air Force (CCAF) transcript; official transcripts from DANTES/USAFI; or verified copies of DD214 or DD295 military records.

Tech Prep

The Tech Prep program awards college credit to high school students who earn an A or B in career-related, "articulated" high school courses. An articulated course is one in which the high school teacher and Palomar College faculty have formally agreed that the high school's course outline, syllabus, textbook, and final exam are comparable to those in a course of the same major at Palomar College.

A Tech Prep student may earn a certificate or associate degree. Tech Prep programs also prepare students for further education leading to baccalaureate and advanced degrees, as well as for direct entry into the workplace as technically skilled employees.

For more information about Tech Prep and 2 + 2 high school course articulation programs contact the Palomar College Tech Prep Coordinator at (760) 744-1150, extension 3047, or in the Career and Technical Education Office in Room AA-134.

TRANSFER, DEGREE, AND CERTIFICATE REQUIREMENTS



6



Section 6 – Graduation and Transfer Information

Palomar College provides occupational as well as general education for the student who plans to complete formal education at the community college level. In addition, the College provides the lower division requirements in general education and in preprofessional majors for those students who plan to transfer to upper division colleges and universities.

To assist the student in educational planning, this section of the catalog describes the graduation requirements for the Associate in Arts degree, the requirements for certificate programs, and information on transfer requirements.

Associate in Arts (AA) Degree Requirements

I. Minimum Units

The Associate in Arts degree requires completion of a minimum of sixty (60) degree-applicable semester units. Courses numbered 1-49 do not count in the sixty (60) units toward the degree. (See the Course Numbering System and Transfer Identification listing.)

II. Grade Point Average (GPA)

Maintain a cumulative grade point average of 2.0 ('C' average) or higher for all degree-applicable course work attempted. Some specific programs may require a higher grade point average. Refer to the individual Programs of Study for further information. In calculating a student's degree applicable grade point average, grades earned in non-degree applicable courses, numbered 1 – 49, will not be included.

III. Residency

Complete a minimum of twelve (12) semester units in residence as an officially enrolled student at Palomar College.

IV. Major

There are three Associate in Arts degree options, General Studies, Specified Palomar Major, and Liberal Arts and Sciences. The District and General Education Requirements listed below apply to all three options.

Option 1 – General Studies

Study in general education providing maximum flexibility in program design leading to an Associate in Arts Degree. Students planning to transfer to a four-year institution are cautioned that this curriculum may not provide for completion of the lower division requirements for transfer to a four-year institution.

Requirements

1. Complete the AA Degree District Requirements.
2. Complete the AA Degree General Education Requirements.
3. Complete one General Studies Emphasis selected from Arts and Humanities, Science and Mathematics, or Social and Behavioral Sciences. See page 159 for a complete listing of Emphasis courses.
4. Complete electives, if needed, to obtain a minimum of 60 degree-applicable units.

Option 2 – Specified Palomar Major

Provides study in general education and an AA degree major designed as preparation for the workplace. Students planning to transfer to a four-year institution may need to meet additional requirements.

Requirements

1. Complete the AA Degree District Requirements.
2. Complete the AA Degree General Education Requirements.
3. Complete the Major Requirements as outlined in the program offerings.
4. Complete electives, if needed, to obtain a minimum of 60 degree-applicable units.

Option 3 – Liberal Arts and Sciences

Study in general education providing maximum flexibility in program design leading to the Associate in Arts Degree, while preparing for transfer to a four-year college or university. Students planning to transfer to a four-year institution will need additional requirements as preparation for a major.

Requirements

1. Complete the AA Degree District Requirements.
2. Complete one General Education transfer pattern as listed below:
 - a) Intersegmental General Education Transfer Curriculum (IGETC) for transfer to the University of California or California State University system
 - b) California State University General Education (CSUGE) Certification pattern
 - c) UCSD Transfer Admission Guarantee (TAG) contract
3. Complete electives, if needed, to obtain a minimum of 60 degree-applicable units.

Contact the Counseling Center (760) 744-1150, ext. 2180, for further information about any of the three AA degree options. Official transcripts from all institutions previously or concurrently attended must be on file with the Records Office.

V. District Requirements

1. Competence in Reading and Written Expression

Complete English 100 with a grade of 'C' or better.

2. Competence in Mathematics

Competence may be demonstrated by course completion or examination.

Course Completion:

Complete Mathematics 56 or 60 with a grade of 'C' or better.

Examination (acceptable tests and scores listed below):

Palomar College Assessment Tests:

ASSET: Minimum score of 24 on the intermediate algebra section

ASSET: Minimum score of 15 on the college algebra section

COMPASS: Minimum score of 57 on the college algebra section

CPT: Minimum score of 86 on the college-level mathematics section

National Tests:

ACT: Minimum score of 19 on the mathematics section

AP: Minimum score of 3 on the Calculus AB or BC exam

CLEP: Minimum score of 50 on an approved CLEP mathematics examination. See a counselor for a list of approved examinations.

SAT I: Minimum score of 550 on the mathematics section

3. Competence in American History and Institutions/California Government

Competence may be demonstrated by course completion or examination.

Course Completion:

Complete one of the following pairs of courses with grades of 'C' or better.

- Africana Studies 101 and 102
- American Indian Studies 101 and 102
- Chicano Studies 101 and 102 (*pending review*)
- History 101 and 102
- History 140 and 141
- Political Science 101 and 102 (*pending review*)

Examination (acceptable tests and scores listed below):

Palomar College departmental exam:

Successfully pass the competency test administered by the Economics, History, and Political Science Department

National Exams (also requires completion of Political Science 120 or 102 with a grade of 'C' or better):

AP: Minimum score of 3 on the American History exam

CLEP: Successfully pass the History of the U.S. I and II exams. Palomar College accepts the ACE (American Council on Education) recommended score for passing. See a counselor for further clarification.

SAT II: Minimum score of 550 on the United States History exam

Students who have completed the American Institutions requirement except for the California government portion must complete one of the following courses:

- Political Science 120 (1 unit)
- Political Science 102 (3 units)

4. Competence in Health and Physical Education

Competence may be demonstrated by course completion, examination, or military service.

Course Completion:

Complete Health 100 with a grade of 'C' or better.

Complete equivalent lecture and physical activity course work with grades of 'C' or better. See approved courses below.

Approved lecture courses (minimum of 9 units):

- Health/Family & Consumer Sciences 165 **and**
- Psychology 100 **and**
- Biology 105 or 106 or Zoology 145 or 200 or 203

Approved physical activity courses (minimum of 1 unit):

- Physical Education 125, 127, 128, 129, 130, 135, 136, 150, 151, or any Athletics and Competitive Sports course

Examination (acceptable tests and scores listed below):

Palomar College departmental exam:

Successfully pass both the written and physical activity competency tests administered by the Physical Education Department

Military Service:

United States military personnel and veterans may be given three units of credit with proof of 181 days of continuous active duty. Submit copy of forms DD214 or DD295 to the Records Office.

Note: Students in programs such as the Police Academy, Fire Academy, or the EME Paramedic program must meet the above course requirements. Students earning degrees in Nursing meet this requirement through completion of the nursing curriculum.

5. Multicultural Requirement

The overall goal of the Palomar College multicultural course requirement is to promote intercultural

understanding and

communication in local, national, and global contexts. Students may satisfy this requirement by completing a minimum of 3 units from the approved courses listed below. These courses may or may not satisfy another institution's multicultural requirement.

Students must be sure that the course is on the approved list during the academic year in which it is taken. The following courses will meet the requirement effective fall 1997, or with the semester noted in brackets. Courses taken prior to fall 1997 may not be used to meet this requirement.

Course equivalencies from other institutions may be accepted if the course meets the spirit of the Palomar Multicultural Course Requirement, i.e., it is focused on a study of culture and includes an emphasis on one or more of the four American subcultures listed in Palomar's requirement: African American, Latino/Latina, Asian or Pacific Islander, and Native American.

Administration of Justice 103

Africana Studies 120 [F98]

American Indian Studies 100, 101, 105 [F99], 110 [F98], 115, 120, 125, 140 (dually listed as ANTH 140), 145, 150, 165 [F99]

American Studies 100, 200 (dually listed as MCS 200 and SOC 200)

Anthropology 105, 140 (dually listed as AIS 140)

Chicano Studies 105 [F98]

Communications 105 [F98]

Counseling 110 [F01]; 120 [F01]

Dance 101 [F98], 105 [F99]

Drafting Technology 121

Economics 115

English 280 [F02]

Family and Consumer Sciences 150 [F98]

Fashion 132 [F98]

History 121 [F99], 130, 140 [F03], 141 [F03]

International Business 110 [F05]

Legal Studies 240 [F99]

Multicultural Studies 100 [F98], 165 [F98], 200 (dually listed as AMS 200 and SOC 200)

Music 171 [F98]

Nursing 103 plus Nursing 217 [F01]

Nursing 110 plus Nursing 217 [F01]

Paralegal Studies 240 [F99]

Religious Studies 110

Sociology 115 [F04], 200 (dually listed as AMS 200 and MCS 200)

Speech 131

VI. General Education Requirements

Because changes may occur in the GE requirements for the AA degree, please check with the Counseling Office for an updated list of acceptable courses. No course may be used to satisfy more than one general education requirement.

A. LANGUAGE AND RATIONALITY

(Complete a minimum of 3 units each from sections 1 and 2)

1. English Composition

English 100

2. Analytical Thinking and Oral Communication

Business 110

Computer Science and Information Systems 105

English 202, 203

Journalism 101

Mathematics 56, 60, 100, 105, 110, 115, 120, 130, 135, 140, 200

Philosophy 101, 102, 115, 120
 Psychology 205
 Reading 120
 Sociology 205
 Speech 100, 105

B. NATURAL SCIENCES

(Complete 3 units from courses listed below)

Anthropology 100, 100L
 Astronomy 100, 105L, 120
 Biology 100, 101, 101L, 102, 105, 106, 106L, 107, 110, 114, 114L, 118, 118L, 130, 131, 131L, 185, 200, 201
 Botany 100, 101, 101L, 110, 115
 Chemistry 100, 102, 110, 110L, 115, 115L, 210
 Earth Sciences 100
 Engineering 210
 Family and Consumer Sciences 185
 Geography 100, 100L, 110, 115, 125
 Geology 100, 100L, 110, 120, 125, 150, 150L
 Microbiology 200
 Oceanography 100, 100L, 101, 115
 Physical Science 100, 100L, 101, 101L
 Physics 101, 102, 120, 200, 201, 230
 Psychology 210
 Zoology 100, 101, 101L, 115, 116, 116L, 120, 145, 145L, 200, 203, 205, 205L

C. HUMANITIES

(Complete 3 units from courses listed below)

Africana Studies 100, 115, 116
 American Indian Studies 100, 105, 135, 141, 142, 143, 144, 145, 150, 151, 152, 153, 154
 American Sign Language 100, 101, 110, 205, 206
 American Studies 100
 Anthropology 135, 155
 Art 100, 102, 104, 105, 165, 166, 167, 168
 Chicano Studies 100, 105, 110, 115, 155
 Chinese 101, 101A, 101B, 102, 102A, 102B, 130, 201, 201A, 201B
 Cinema 100, 102, 103, 110, 120
 Dance 100, 101, 105
 Drafting Technology 120
 English as a Second Language 101, 102, 103
 English 205, 210, 211, 215, 220, 221, 225, 226, 230, 240, 245, 250, 255, 260, 265, 270, 280, 290
 Fashion 130, 132
 French 101, 101A, 101B, 102, 102A, 102B, 131, 140, 201, 202
 German 101, 101A, 101B, 102, 102A, 102B, 201, 202
 Graphic Communications 101
 History 105, 106
 Humanities 100, 101, 150
 Interior Design 115
 Italian 101, 102, 201, 201A, 201B
 Japanese 101, 101A, 101B, 102, 201, 202
 Judaic Studies 100
 Music 100, 101, 102, 103, 166, 167, 170, 171
 Philosophy 100, 105, 110, 255
 Photography 100, 125
 Radio and Television 100
 Religious Studies 101, 105, 110, 120
 Spanish 101, 101A, 101B, 102, 102A, 102B, 201, 201A, 201B, 202, 240, 241
 Speech 125
 Tagalog 101, 102, 201
 Theatre Arts 100, 125, 140, 141

D. SOCIAL AND BEHAVIORAL SCIENCES **(Complete 3 units from courses listed below)**

Administration of Justice 100

Africana Studies 101, 102, 110, 120, 125, 126
 American Indian Studies 101, 102, 120, 125, 130, 140, 165
 American Studies 110, 200
 Anthropology 105, 110, 115, 125, 126, 130, 140, 145, 150
 Chicano Studies 101, 102, 120, 125
 Child Development 100, 110, 115
 Communications 100, 105
 Economics 100, 101, 102, 110, 115
 English 150
 Family and Consumer Sciences 101
 Geography 103, 105
 History 101, 102, 107, 108, 110, 114, 130, 140, 141, 150, 151, 152
 Judaic Studies 105
 Legal Studies 121, 240
 Multicultural Studies 100, 110, 165, 200
 Paralegal Studies 121, 240
 Political Science 100, 101, 102, 110
 Psychology 100, 105, 110, 120, 130
 Sociology 100, 105, 110, 115, 120, 200
 Speech 120, 131

E. INTEGRATED SELF AND LIFE-LONG LEARNING **(Complete 3 units from courses listed below)**

Business 100, 136
 Child Development 100
 Computer Science and Information Systems 105
 Counseling 100, 110, 115, 120
 Electronics and Computer Hardware Technology 160
 Family and Consumer Sciences 105, 136, 150, 165
 Gerontology/Geriatrics 120
 Health 100, 165
 Library Technology 120, 154
 Psychology 105, 115, 125, 145
 Reading 110
 Sociology 105, 125, 145
 Speech 115

Additional Degree Information

Catalog Rights and Continuous Enrollment Criteria

The catalog used to determine eligibility for graduation will be the catalog in use at the time the student began continuous enrollment at Palomar College. A student may also elect to graduate under the catalog in use during the semester of application for graduation.

Continuous enrollment is defined as attendance in one semester or two quarters (excluding summer) within a calendar year in the CSU, UC, or California Community College system. For example, a student attending Palomar College during the spring semester of a given year, not attending Palomar College, UC, or CSU during the following summer, but returning to Palomar the following fall semester, would be in continuous enrollment. If a student does not maintain continuous enrollment, the evaluation will be based on the requirements in effect at the time of return to Palomar College.

Notice of Intent to Graduate

When all District and General Education Requirements are completed or in progress, students should submit an Application for Graduation to the Evaluations Office in the Student Services Center, room SSC-40. Applications are available in the Counseling or Transfer Centers, the Evaluations Office, or online. Deadlines are strictly adhered to; applications must be submitted no later than the dates listed below.

Spring graduation – February 28th

Summer graduation – June 30th

Fall graduation – September 30th

Second Associate in Arts Degree

1. A student who has received an AA degree, and maintained continuous enrollment, may pursue subsequent AA degrees by fulfilling the major requirements.
2. A student who has received an AA degree, but did not maintain continuous enrollment, may pursue a new program under the catalog of readmission.
3. A student who has received an AA degree, but did not maintain continuous enrollment, may pursue subsequent AA degrees by fulfilling the major, GE, and district requirements under the catalog of readmission.
4. A student with an AA degree from another college must pursue subsequent AA degrees at Palomar by fulfilling the major, GE, and district requirements under the catalog of readmission.
5. Subsequent diplomas and certificates are conferred in May.

Certificate of Achievement (CA) Requirements

Official transcripts from all previous institutions attended must be on file with the Records Office. Students will be eligible to receive a Certificate of Achievement if they complete the specific course requirements as listed under the majors in the next section of the catalog. In addition to the course requirements, students should be aware of the following guidelines.

1. Fifty percent (50%) of a certificate program must be taken in residence at Palomar College. The remaining courses may be completed at other accredited institutions. Substitutions or waivers must be approved by the appropriate Department Chair/Director.
2. A grade of 'C' or higher must be achieved in all certificate courses except where other grade requirements are specified by law. A Department Chair/Director may waive one (1) 'D' grade with written justification.
3. Equivalent courses from other institutions may be determined by the Evaluations Office with the exception of Water/Wastewater Technology Education. Certificate credits or courses may be substituted or further equivalencies determined with written justification and approval of the Department Chair/Director.
4. Continuous enrollment is defined as attendance in one semester or two quarters (excluding summer) within a calendar year in the CSU, UC, or California Community College system. If a student does not maintain continuous enrollment, the evaluation will be based on the requirements in effect at the time of return to Palomar College.
5. It is the responsibility of the student to ensure satisfactory completion of the certificate requirements. When all requirements are completed or in-progress, students should submit an Application for Graduation to the Evaluations Office in the Student Services Center, room SSC-40. Applications are available in the Counseling or Transfer Centers, the Evaluations Office, or online. Deadlines are strictly adhered to; applications must be submitted no later than the dates listed below:
 Spring graduation – February 28th
 Summer graduation – June 30th
 Fall graduation – September 30th

Conferring of Degrees and Certificates of Achievement

Associate in Arts degrees and Certificates of Achievement will

be conferred formally at the Commencement ceremony held in May at the end of each spring semester. However, students will receive their degree or certificate following the close of the semester in which they apply for graduation.

Certificate of Proficiency (CP) Requirements

Certificates of Proficiency are designed to certify basic workplace competencies and job readiness for students who are entering the workforce. In addition to course and certificate requirements, students should be aware of the following:

1. All courses required for each certificate must be taken in residence at Palomar College.
2. A grade of 'C' or higher must be achieved in all certificate courses except where other grade requirements are specified by law.
3. It is the responsibility of the student to ensure satisfactory completion of the certificate requirements. When all requirements are completed or in-progress, students should submit an application for the certificate to the Evaluations Office. Applications are available in the Counseling Center, Transfer Center, Evaluations Office, or online.
4. Applications must be submitted no later than:
 Spring deadline – February 28th
 Summer deadline – June 30th
 Fall deadline – September 30th
5. Certificates of Proficiency are not awarded at the Palomar College Commencement Ceremony. Certificates will be mailed to students following the close of the semester in which they apply.

Transfer Planning

Students planning to transfer to a four-year university have a wide variety of options. The California State University (CSU) with 23 campuses, the University of California (UC) with 9 campuses, and 77 private, independent colleges in California provide a wide range of academic programs, physical and academic environments, and social climates. Palomar College offers the equivalent of the first two years of these four-year college and university degrees. Students wishing to pursue any of these educational alternatives should meet with a counselor as early as possible to discuss their educational plan.

Successful transfer planning requires the following steps:

- Selecting an academic/career goal
- Selecting an appropriate major to meet your goal
- Selecting the most suitable college or university
- Developing and completing a course of study in preparation for transfer
- Completing the application process

Students are encouraged to take advantage of the resources and assistance available in the Transfer Center to successfully complete the steps listed above.

All colleges and universities have specific admission requirements, and may have course and unit requirements as well as minimum grade point averages that must be met prior to transfer. Four-year colleges and universities require students to complete specific general education requirements and major preparation requirements. Students should complete as many of these requirements as possible before they transfer. The Transfer and Counseling Centers maintain articulation agreements with many colleges and universities which list

courses that satisfy general education requirements and lower division major preparation for transfer.

The California State University (CSU) System

The California System of State Universities and Colleges provides upper-division educational programs for California Community College transfer students.

Palomar College students wishing to transfer to a California State University may choose from the following campuses:

Bakersfield (Q)	California Maritime Academy (S)
Cal Poly, Pomona (Q)	Cal Poly, San Luis Obispo (Q)
Channel Islands (S)	Chico (S)
Dominguez Hills (Q)	Fresno (S)
Fullerton (S)	East Bay (Q)
Humboldt (S)	Long Beach (S)
Los Angeles (Q)	Monterey Bay (S)
Northridge (S)	Sacramento (S)
San Bernardino (Q)	San Diego (S)
San Francisco (S)	San Jose (S)
San Marcos (S)	Sonoma (S)
Stanislaus (4-1-4)	

S = Semester system; Q = Quarter system

Students planning to transfer to a California university should plan a program to meet the admissions and graduation requirements of the specific institution that they plan to attend. Transfer admission eligibility is based on transferable college units and/or high school record(s) and test scores. Each institution has its own requirements for admission and for junior standing. To prepare for transfer, students must decide which campus they will attend through research in the Transfer Center, SSC Building, and consult a counselor for the specific requirements for that particular campus and to create a written educational plan.

Upper Division Transfer Admission Requirements

You are eligible for admission if you:

1. Have a college grade point average of 2.0 or better (2.4 for non-California residents) in all transferable college units completed.
2. Are in good standing at the last college or university attended, i.e., you are eligible to re-enroll.
3. Have completed or will complete prior to transfer at least 30 semester units (45 quarter units) of courses which include English Composition, Oral Communication, Critical Thinking, and Mathematics, with grades of 'C' or better in each course.
4. Have a total of 60 CSU transferable units.

Please be advised that these are **minimum entrance requirements**, and that they do not guarantee admission to any of the 23 CSU campuses. Many CSU campuses are currently requiring completion of all general education courses, as well as completion of all lower division major preparatory course work offered at the community college you are attending. GPA requirements will vary with the applicant pool. **Prospective transfer students are urged to make an appointment with a counselor to begin their transfer planning early.**

Application Filing Periods

All California State Universities use a common admission process. Some campuses require supplemental application

materials. Students are encouraged to apply online at www.csumentor.edu. Most campuses will acknowledge receiving your application within two to four weeks.

Fall Semester or Quarter	2006	October 1, 2005
Summer Semester or Quarter	2006	February 1, 2006
Winter Quarter	2007	June 1, 2006
Spring Semester or Quarter	2007	August 1, 2006

General Education/Breadth Options

All campuses of the CSU system require a minimum of 48 semester units of general education. Thirty-nine of these units may be taken at community colleges. Students may fulfill the lower division general education requirements prior to transfer by completing one of the following three options:

1. The California State University General Education Certification pattern which will fulfill the lower division general education/breadth requirements for all CSU campuses.
2. The Intersegmental General Education Transfer Curriculum which will fulfill the lower division general education/breadth requirements for all CSU and most UC campuses.
3. The specific lower division general education/breadth requirements of the campus to which they intend to transfer.

The California State University General Education Certification pattern is listed below, and the Intersegmental General Education Transfer Curriculum pattern is listed on page 53. Students should consult a Palomar College counselor to determine which option is best suited for their educational objective.

General Education Certification

Certification is a legal agreement between CSU and community colleges in California to assure that CSU lower division general education requirements have been satisfied.

Upon student request the Evaluations Office at Palomar College will provide certification of appropriate general education course work. Official transcripts from other colleges and universities must be on file before submitting the application, and will be reviewed for inclusion in the certification process.

California State University General Education (CSUGE) Requirements

The following is a General Education pattern which will meet all lower-division General Education requirements at any CSU campus.

Minimum Units

A minimum of 39 semester units is required for full certification of lower-division general education requirements.

Grade Point Average

A minimum of 2.00 ('C' average) is required.

Foreign, Military, CLEP Information

Palomar College will not include foreign course work, military training, or CLEP tests on the GE certification. Due to the varying policies in the acceptance of foreign transcripts, military schooling, and CLEP scores, the determination regarding their use is left to the transfer institution.

Application for Certification

Upon enrollment in final requirements, students should submit

an Application for Transfer GE Certification to the Evaluations Office in the Student Services Center, room SSC-40. To be eligible for certification, 12 of the required 39 semester units must be completed at Palomar College.

AREA A: COMMUNICATION IN THE ENGLISH LANGUAGE AND CRITICAL THINKING

9 units – one course required from each group below. Minimum grade of 'C' required.

- 1. Oral Communication**
Speech 100
- 2. Written Communication**
English 100*
- 3. Critical Thinking**
English 202, 203
Philosophy 101, 102, 115, 120
Reading 120
Speech 105

AREA B: PHYSICAL UNIVERSE AND ITS LIFE FORMS

9 units – one course required from each group below. A lab course must be taken in either group 1 or 2.

- 1. Physical Science**
Astronomy 100, 105L, 120
Chemistry 100, 102, 110*, 110L*, 115*, 115L*, 210
Earth Sciences 100
Geography 100, 100L, 110, 115, 125
Geology 100, 100L, 110, 120, 125, 150, 150L
Oceanography 100, 100L, 101, 115
Physical Science 100, 100L, 101, 101L
Physics 101, 102, 120, 200, 201, 230
- 2. Life Science**
Anthropology 100, 100L
Biology 100*, 101, 101L, 102, 105, 106, 106L, 107, 110, 114, 114L, 118, 118L, 120, 130, 131, 131L, 200, 201
Botany 100, 101, 101L, 110, 115
Microbiology 200
Psychology 210
Zoology 100, 101, 101L, 110, 111, 111L, 115, 116, 116L, 120, 145, 145L, 200, 203, 205, 205L
- 3. Laboratory Activity**
This requirement may be met by the completion of any lab course above in B-1 or B-2. The lab and lecture courses must be related subjects. Lab only courses are identified with an 'L' and courses with labs included are underlined.
- 4. Mathematics/Quantitative Reasoning (Minimum grade of 'C' required)**
Math 100, 105, 106, 110, 115, 120, 130, 135, 140*, 141, 200, 205, 206
Psychology 205
Sociology 205

AREA C: ARTS, LITERATURE, PHILOSOPHY AND FOREIGN LANGUAGES

9 units – three courses required, with at least one in Arts and one in Humanities.

- 1. Arts (Art, Dance, Music, Theatre)**
American Indian Studies 105, 135
Art 100, 102, 104, 105, 165*, 166*, 167, 168
Cinema 100, 102, 103, 110, 120
Dance 100, 101, 105
Drafting Technology 120, 121
Fashion 130

Graphic Communications 101
Music 100, 101, 102, 103, 166, 167, 170, 171
Photography 125
Radio and Television 100
Speech 125
Theatre Arts 100, 125, 140, 141

2. Humanities (Literature, Philosophy, Foreign Language)

Africana Studies 115, 116
American Indian Studies 100, 143, 144, 145, 150, 153, 154
American Sign Language 100, 101, 110, 205, 206
American Studies 100
Anthropology 135, 155
Chicano Studies 100, 105, 110, 115, 155
Chinese 101, 101A, 101B, 102, 102A, 102B, 130, 201, 201A, 201B
English 205*, 210, 211, 215, 220, 221, 225, 226, 230, 240, 245, 250, 255, 260, 265, 270, 280, 290
English as a Second Language 101, 102, 103
French 101, 101A, 101B, 102, 102A, 102B, 131, 201, 202
German 101, 101A, 101B, 102, 102A, 102B, 201*, 202*
History 105*, 106*
Humanities 100, 101
Italian 101, 102, 201, 201A, 201B
Japanese 101, 101A, 101B, 102, 201, 202
Judaic Studies 100
Philosophy 100, 105, 110, 255
Religious Studies 101, 105, 110, 120
Spanish 101, 101A, 101B, 102, 102A, 102B, 201*, 201A, 201B, 202*
Tagalog 101, 102, 201

AREA D: SOCIAL, POLITICAL, AND ECONOMIC INSTITUTIONS AND BEHAVIOR; HISTORICAL BACKGROUND

9 units – three courses required from at least two disciplines.

- 1. Anthropology and Archaeology**
Africana Studies 126
American Indian Studies 130, 140
Anthropology 105, 110, 115, 125, 126, 130, 140, 145, 150
English 150
- 2. Economics**
Economics 100, 101, 102, 110, 115
- 3. Ethnic Studies**
Africana Studies 100, 101, 102, 110, 120, 125
American Indian Studies 101, 102, 120, 125, 130, 140, 165
American Studies 110, 200
Anthropology 105, 115, 130, 140, 145
Chicano Studies 101, 102, 120, 125
History 150, 151
Judaic Studies 105
Multicultural Studies 100, 110, 165, 200
Sociology 200
- 4. Gender Studies**
American Indian Studies 165
History 130
Psychology 130
Sociology 115
- 5. Geography**
Geography 103, 105

6. History

Africana Studies 101, 102
 American Indian Studies 101
 Chicano Studies 101, 125
 History 101*, 102*, 107, 108, 110, 114, 130, 140, 141, 150, 151, 152
 Judaic Studies 105

7. Interdisciplinary, Social or Behavioral Science

Fashion 132
 Speech 131

8. Political Science, Government and Legal Institutions

American Indian Studies 102
 Africana Studies 110
 Chicano Studies 102
 Political Science 100, 101, 102, 110

9. Psychology

Child Development 100, 110
 Family and Consumer Sciences 101
 Psychology 100, 110, 120, 130
 Sociology 120

10. Sociology and Criminology

Administration of Justice 100
 Africana Studies 120
 American Indian Studies 125
 American Studies 200
 Chicano Studies 120
 Child Development 115
 Communications 100, 105
 Multicultural Studies 200
 Psychology 105, 120
 Sociology 100, 105, 110, 115, 120, 200
 Speech 120

AREA E: LIFELONG UNDERSTANDING AND SELF-DEVELOPMENT**3 units – complete one course.**

Biology 185
 Child Development 100
 Computer Science and Information Systems 105
 Counseling 110, 115, 120
 Family and Consumer Sciences 105, 150, 165, 185
 Gerontology/Geriatrics 120
 Health 100, 165
 Library Technology 154
 Psychology 105, 115, 125, 145
 Reading 110
 Sociology 105, 125, 145
 Speech 115

AMERICAN HISTORY AND INSTITUTIONS REQUIREMENT

All CSU campuses require completion of American History and Institutions courses. The following courses at Palomar have been approved to meet this requirement. Complete one pair of courses:

Africana Studies 101 and 102
 American Indian Studies 101 and 102
 Chicano Studies 101 and 102 (*pending review*)
 History 101* and 102*
 History 140 and 141
 Political Science 101 and 102 (*pending review*)

NOTE: Only 3 of the 6 units used to meet this requirement may be counted in Area D.

*Palomar credit for these courses may be earned by Advanced

Placement (AP) Examinations taken in high school. See the Counseling Office for appropriate exams and scores.

The University of California (UC) System

The University of California is an integral part of the public education system of California. The campuses of the University of California are located in:

Berkeley (S)	Davis (Q)
Irvine (Q)	Los Angeles (Q)
Merced (S) *	Riverside (Q)
Santa Barbara (Q)	Santa Cruz (Q)
San Diego (Q)	San Francisco (Q) +

S = Semester system; Q = Quarter system

+ San Francisco is primarily for graduate level medical studies

Each campus of the University of California accepts course work from the California Community College system designated as UC transferable at full unit value. Students intending to transfer to the university will find it advantageous to complete their lower division requirements at Palomar College. A maximum of 70 UC transferable units is honored by the university campuses. To prepare for transfer, students must decide which college they will attend through research in the Transfer Center, SSC Building, and consult a counselor for the specific requirements for that particular campus and to create a written educational plan.

Upper Division Transfer Admission Requirements

You are eligible for admission if you:

1. Complete 60 semester (90 quarter) units of transferable college credit with a grade point average of at least 2.4 (2.8 or higher for non-resident students).
2. Complete the following course pattern, earning a grade of 'C' or better in each course:
 - a) Two transferable college courses in English composition
 - b) One transferable college course in mathematical concepts and quantitative reasoning
 - c) Four transferable college courses chosen from at least two of the following subject areas: the arts and humanities, the social and behavioral sciences, and the physical and biological sciences.

Application Filing Periods

The University of California system includes nine campuses. All campuses, except for the San Francisco Medical School, follow similar entrance requirements and use a common application form. However, individual campuses may impose additional entrance criteria for impacted majors and programs. Consult the university catalog, a member of the Palomar College counseling staff, or <http://www.assist.org> for specific information.

Berkeley:

Fall Semester 2006	Nov. 1 – 30, 2005
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All other campuses:

Fall Quarter 2006	Nov. 1 – 30, 2005
Winter Quarter 2007	July 1 – 31, 2006
Spring Quarter 2007	Oct. 1 – 31, 2006

NOTE: Courses approved for IGETC will meet these admissions requirements for the University of California.

Students may transfer up to 70 UC transferable community

college units to the UC. A minimum 2.4 GPA is required for admission, but most of the UC campuses use a 2.8 or higher GPA depending upon the major.

Detailed information on how to make up missing high school subjects is available in the Counseling and Transfer Centers. A complete listing of all Palomar courses which transfer to the UC campuses is also available in both centers.

General Education/Breadth Options

Each school and college at every UC campus has its own general education/breadth requirements. Students may fulfill the lower division general education/breadth requirements at any UC campus by completing one of the following two options:

1. The Intersegmental General Education Transfer Curriculum (IGETC) which will fulfill the lower division general education/breadth requirements for all UC and CSU campuses.*
2. The specific lower division general education/breadth requirements of the campus they intend to transfer to.

The Intersegmental General Education Transfer Curriculum follows below and is also listed on the Assist website at <http://www.assist.org>. Students should consult a Palomar College counselor to determine which option is best suited for their educational objective.

* Use of the IGETC to satisfy lower-division General Education requirements is either not allowed under some circumstances or not recommended for some majors. Consult a counselor regarding these restrictions.

General Education Certification

Certification is a legal agreement between UC and community colleges in California to assure that UC lower division general education requirements have been satisfied.

The entire pattern must be completed prior to transfer. Upon enrollment in final requirements, the student should submit a request for certification, along with the Advising Guide (signed by a Counselor) to the Evaluations Office. Official transcripts from other colleges and universities must be on file before submitting the application, and will be reviewed for inclusion in the certification process.

Transfer Admission Guarantee Programs

Palomar College has transfer admission guarantee programs with five UC campuses. All of these agreements guarantee admission into the university and some guarantee admission into the major.

Contracts may be signed after completing thirty (30) UC transferable units with a 2.8 grade point average. Students should consult with the Transfer Center as soon as possible in order to become familiar with the criteria and contract filing deadlines.

The following is a list of UC campuses with which Palomar College has admission guarantee programs.

University of California, Davis (UCD)

Palomar College has a Transfer Admission Agreement (TAA) with UC Davis, which guarantees admission to the university and to most of the majors.

University of California, Riverside (UCR)

Palomar College participates in a Transfer Admission Guarantee (TAG) program with UC Riverside, which guarantees admission to the university and all majors except Engineering.

University of California, San Diego (UCSD)

Palomar College participates in a Transfer Admission Guarantee

(TAG) program with UC San Diego, which guarantees admission to the university. This program allows transfer admission to the term of your choice.

UCSD University Link Program

Graduating North County high school seniors are eligible for this program which promotes preparation for guaranteed admission to UCSD. This program links Palomar students with activities, courses, and counselors from Palomar and UC San Diego. Contact the Counseling Center for more information.

University of California, Santa Barbara (UCSB)

Palomar College participates in a Transfer Admission Agreement (TAA) with UC Santa Barbara, which guarantees admission to the university and to most of the majors.

University of California, Santa Cruz (UCSC)

Palomar College has a Guaranteed Admission for Transfer Entry (GATE) program to UC Santa Cruz, which guarantees admission to the university.

Intersegmental General Education Transfer Curriculum (IGETC) Requirements – UC/CSU

Please read before following the IGETC

The IGETC is a general education pattern which will meet all lower-division general education requirements at most CSU or UC campuses.

It should be noted that completion of the IGETC is not a requirement for admission to CSU or UC, nor is it the only way to fulfill the lower-division general education requirements of the CSU or UC prior to transfer. Depending upon a student's major and field of interest, the student may find it advantageous to fulfill the CSU general education requirements, or those of the UC campus or college to which the student plans to transfer. Some colleges within the UC system will not accept IGETC. **It is strongly recommended that students consult with a counselor to determine which general education pattern is the most appropriate for them.**

Rules for using the IGETC pattern

1. The entire pattern must be completed prior to transfer. Upon enrollment in final requirements, the student must submit a request for certification to the Evaluations Office.
2. All IGETC courses must be completed with a grade of 'C' or better. A 'C-' is not acceptable.
3. UC transfers need not complete the Oral Communication requirement (Area 1, Group C).
4. CSU transfers need not complete the Language Other Than English requirement. It is recommended that CSU transfers complete the U.S. History, Constitution, and American Ideals requirement prior to transfer.
5. Some UC transferable courses have credit limitations. For example, students may not earn UC credit for Botany 115 if taken after Botany 100. Specific limitations are indicated with the course descriptions in the PC Catalog.
6. Some UC campuses may not allow use of the IGETC for students who were previously enrolled at a UC campus. See your counselor for these restrictions.
7. Palomar can certify coursework completed at other California Community Colleges provided that it appears on their IGETC course list. Coursework completed at other colleges and universities may be included with

approval from PC faculty and the Evaluations Office. CLEP credit or foreign coursework will not be included on the IGETC certification.

8. Advanced Placement (AP) exams can be used to satisfy all areas of IGETC except for Areas 1B and 1C. AP exams with a minimum score of 3 may be used provided they equate to an approved IGETC course. Credit will be given for only one course per area.
9. Students wishing to use a course to meet an IGETC requirement must be sure that the course is on the approved list during the academic year in which it is taken. Refer to the statement and semester approval lists following the IGETC pattern.
10. For any exceptions to the above, contact the Articulation Officer in the Counseling Center.

AREA 1: ENGLISH COMMUNICATION

CSU: 3 courses, 9 semester units

UC: 2 courses, 6 semester units (1 each from groups A and B)

Group A: English Composition

(1 course, 3 semester units)

English 100

Group B: Critical Thinking-English Composition

(1 course, 3 semester units)

English 202, 203

Philosophy 115

Group C: Oral Communication – CSU only

(1 course, 3 semester units)

Speech 100

AREA 2: MATHEMATICAL CONCEPTS AND QUANTITATIVE REASONING

(1 course, 3 semester units)

Mathematics 110, 120, 130, 135, 140, 141, 200, 205, 206

Psychology 205 (dually listed as SOC 205)

Sociology 205 (dually listed as PSYC 205)

AREA 3: ARTS AND HUMANITIES

(3 courses, 9 semester units)

Three courses required, with at least one from Arts and one from Humanities.

Group A: Arts Courses

American Indian Studies 105, 135

Art 100, 165, 166, 167, 168

Cinema 100, 102, 103, 110, 120

Dance 100, 101, 105

Music 100, 101, 102, 166, 167, 168, 170, 171

Photography 125

Theatre Arts 100, 140, 141

Group B: Humanities Courses

Africana Studies 115, 116

American Indian Studies 100, 145, 150

American Studies 100

Anthropology 135, 145, 155

Chicano Studies 100, 105, 110, 115, 155

Chinese 130, 201

English 205, 210, 211, 215, 220, 221, 225, 226, 230, 240, 245, 250, 255, 260, 265, 270, 280, 290

French 131, 201, 202

German 201, 202

History 105, 106

Humanities 100, 101

Italian 201

Japanese 201, 202

Judaic Studies 100

Philosophy 100, 101, 105, 110, 135, 136, 255

Religious Studies 101, 105, 110, 120

Spanish 201, 202

Tagalog 201

AREA 4: SOCIAL AND BEHAVIORAL SCIENCES (3 courses, 9 semester units)

Three courses required from at least two disciplines. Dually listed courses, or those which appear in more than one group, may be counted only once.

Group A: Anthropology and Archaeology

Africana Studies 126

American Indian Studies 130, 140

Anthropology 105, 110, 115, 125, 126, 130, 140, 150

English 150

Group B: Economics

Economics 100, 101, 102, 110, 115

Group C: Ethnic Studies

Africana Studies 100, 101#, 102#, 110, 120, 125

American Indian Studies 101#, 102#, 110, 115, 120, 125, 130, 140, 165

American Studies 110, 200

Anthropology 105, 115, 130, 140

Chicano Studies 101#, 102#, 120, 125

History 150, 151

Judaic Studies 105

Multicultural Studies 100, 110, 165, 200

Sociology 200

Group D: Gender Studies

American Indian Studies 165

History 130

Sociology 115

Group E: Geography

Geography 103, 105

Group F: History

American Indian Studies 101#, 102#

Chicano Studies 101#, 125

History 101#, 102#, 107, 108, 110, 114, 130, 140#, 141#, 150, 151, 152

Judaic Studies 105

Group G: Interdisciplinary, Social or Behavioral Science

Group H: Political Science, Government and Legal Institutions

Africana Studies 110

American Indian Studies 102#

Chicano Studies 102#

Political Science 100, 101#, 102#, 110, 125

Group I: Psychology

Child Development 100

Psychology 100, 110, 120, 125

Sociology 120, 125

Group J: Sociology and Criminology

Administration of Justice 100

American Indian Studies 120, 125

American Studies 200

Chicano Studies 120

Communications 100, 105

Multicultural Studies 200

Psychology 105, 120, 125

Sociology 100, 105, 110, 115, 120, 125, 200

Speech 120

May not be used to meet Social and Behavioral Sciences requirement if used to meet the CSU American History and Institutions requirement.

AREA 5: PHYSICAL AND BIOLOGICAL SCIENCES (2 courses, 7-9 semester units)

Two courses required - one Physical Science and one Biological Science course. At least one must include a laboratory. Lab only courses are indicated with an L, and courses with a lab included are underlined.

Physical Science Courses

Astronomy 100, 105L, 120
Chemistry 100, 102, 105, 110, 110L, 115, 115L, 210, 220, 221
Earth Science 100
Geography 100, 100L, 110, 115
Geology 100, 100L, 120, 150, 150L
Oceanography 100, 100L, 101, 115
Physical Science 100, 100L
Physics 101, 102, 120, 121, 200, 201, 230, 231, 232

Biological Science Courses

Anthropology 100, 100L
Biology 100, 101, 101L, 102, 105, 106, 106L, 107, 110, 114, 114L, 118, 118L, 130, 131, 131L, 200, 201
Botany 100, 101, 101L, 115
Microbiology 200
Psychology 210
Zoology 100, 101, 101L, 115, 116, 116L, 120, 145, 145L, 200, 203, 205, 205L

LANGUAGE OTHER THAN ENGLISH – UC ONLY

Satisfy one of the following:

1. Proficiency equivalent to two years of high school study in the same language with a grade of 'C' or better.
2. One of the following courses completed with a grade of 'C' or better:
American Sign Language 100, Chinese 101, French 101, German 101, Italian 101, Japanese 101, Spanish 101, Tagalog 101

CSU GRADUATION REQUIREMENT IN U.S. HISTORY, CONSTITUTION, AND AMERICAN IDEALS

- Not part of IGETC; may be completed prior to transfer.
- Complete one of the following pairs of courses:
Africana Studies 101 and 102; American Indian Studies 101 and 102; Chicano Studies 101 and 102 (*pending review*); History 101 and 102; History 140 and 141; Political Science 101 and 102 (*pending review*)

NOTE: Courses used to meet this requirement may not be used to satisfy requirements for Area 4 above.

The IGETC program began in Fall 1991. Course work completed prior to that term may be used for IGETC if it appeared on the 1991-92 IGETC course list. All courses taken in Fall 1991 or later must be on the approved IGETC list at the time they were taken. Courses added to the IGETC list are listed below with their approval date. It is important for students to have an updated list each year while at the community college.

FALL 1992 Additions:

AJ 100; BIOL 131L; BOT 115; CHEM 210; COMM 100, 105; ENG 202, 203; FREN 220, 225, 230; GEOG 110; MATH 200; MUS 170; PHIL 115; RUSS 220; ZOO 120, 145

FALL 1993 Additions:

BIOL 102, 118; CS 125; ENG 270, 280; MATH 150; MCS 165; SPCH 120; ZOO 145L, 203

FALL 1994 Additions:

No additions

FALL 1995 Additions:

AMS 200; CINE 120; HIST 150, 151; MCS 200; SOC 200

FALL 1996 Additions:

AIS 165; AS 126; ANTH 126; ART 163, 164; HIST 107, 108; MUS 171 ; OCN 101; PSYC 205; SOC 205

FALL 1997 Additions:

FREN 201, 210; GERM 201, 210; ITAL 101; JAPN 201, 210; LAT 201, 210; RUSS 201, 210; SPAN 201, 210

FALL 1998 Additions:

BIOL 107, 114, 118L; CHEM 102; DNCE 101; GEOG 115; HIST 109, 114; PHYS 115

FALL 1999 Additions:

AMS 110; MCS 110; OCN 115; PHSC 100L; PHYS 110; TAG 101

FALL 2000 Additions:

BIOL 114L

FALL 2001 Additions:

CHIN 130, 201; ITAL 201; TAG 201

FALL 2002 Additions:

ASL 100; CINE 102, 103; PHYS 101, 102, 200, 201

FALL 2003 Additions:

ANTH 100L; ENG 290

FALL 2004 Additions:

ENG 265

Fall 2005 Additions:

ANTH 125; GEOG 103; HIST 152; PSYC/SOC 105

Independent California Colleges and Universities

There are 77 fully-accredited independent colleges and universities currently affiliated with the Association of Independent California Colleges and Universities (AICCU) providing a host of options at undergraduate, graduate, and professional levels for students planning to continue their education beyond Palomar College.

Admissions policies vary widely from one school to another, and virtually all institutions give full credit for general education courses and usually for courses designated for transfer by the community college. A good rule to follow for independent colleges as well as for out-of-state institutions is to expect full credit for courses which are parallel in scope and content to courses offered for credit to lower division "native" students at those institutions. Articulation agreements for many independent institutions are available in the Counseling Center.

Independent colleges are flexible in admission policies and in awarding credit. They invite interested students to make an appointment with their Office of Admissions in order to discuss transfer opportunities on a personal basis.

Financial aid may be a primary factor in considering attending an independent college. Most students cut the cost in half by attending the community college to complete the lower division course work and requirements. Information on financial aid and scholarships is available from the financial aid offices on independent college campuses as well as in the Financial Aid Office at Palomar College.

Students are advised to refer to the AICCU's web site at www.aiccu.edu.

Private and Out-of-State Universities

Palomar College offers courses similar to those offered in the lower division, or the first two years, of four-year colleges and universities. Since course requirements for graduation vary between colleges, it is to the student's advantage to choose the college or university to which he or she plans to transfer as early as possible.

Students are advised to complete the courses at Palomar College which best satisfy the lower division course requirements at that particular college or university to which he or she ultimately transfers. Lower division course requirements typically include a set of general education courses as well as a sequence of courses in the student's chosen major field of study.

Students are encouraged to meet with a counselor to develop an academic program best suited for their transfer institution and intended major. The Transfer and Counseling Centers maintain materials to assist students in their transfer planning.

PROGRAMS AND COURSE OFFERINGS



Discipline and Program Offerings

AA: Associate in Arts Degree

CA: Certificate of Achievement

CP: Certificate of Proficiency

Accounting 64

Accounting (AA, CA)

Bookkeeping/Accounting Clerk (CP)

Administration of Justice 65

AJ – Law Enforcement (AA)

Basic Police Academy (CA)

Aeronautical Sciences 67

Aeronautical Operations and Management (AA, CA)

Aircraft Commercial Pilot (AA, CA)

Africana Studies 69

Africana Studies (CP)

Air Conditioning, Heating, and Refrigeration (ROP) 238

Air Conditioning, Heating, and Refrigeration (CP)

American Indian Studies 70

American Indian Studies (CA)

American Sign Language 72

ASL/English Interpreter Training Program (AA, CA)

American Studies 74

Anthropology 74

Archaeological Excavator (CA)

Archaeological Surveyor and Lab Assistant (CA)

Archaeology (AA)

Apprenticeship Training 77

Carpentry (AA, CA)

Drywall/Lather (AA, CA)

Electrician (AA, CA)

Sheet Metal (AA, CA)

Sound and Communication Systems Installer (AA, CA)

Sound Technician (AA, CA)

Arabic 83

Art 84

Digital Animation, Compositing, and Music (CP)

Graphic Design (AA)

Illustration (AA)

Interactive Media Design

Emphasis in 3D Modeling and Animation (AA, CA)

Emphasis in Multimedia Design (AA, CA)

Pictorial Arts

Emphasis in Painting (AA)

Emphasis in Printmaking (AA)

Three-Dimensional Arts

Emphasis in Ceramics (AA)

Emphasis in Crafts (AA)

Emphasis in Glass (AA)

Emphasis in Jewelry and Metalsmithing (AA)

Emphasis in Sculpture (AA)

Art – Design 90

Graphic Design (AA)

Art – Illustration 91

Illustration (AA)

Astronomy 93

Astronomy (AA, CA)

Athletics and Competitive Sports 93

Automotive Technology 94

Auto Body Work (AA, CA)

Auto Chassis and Drive Lines (AA, CA)

Electronic Tune-Up/Computer Control Sys (AA, CA)

Mechanics – General (AA, CA)

Automotive Technology (ROP) 238

Auto Body Work (AA, CA)

Biology 95

Biology – General (AA, CA)

Biology – Preprofessional (AA, CA)

Botany 98

Business Education 99

Advertising, Marketing, and Merchandising (AA, CA)

Business Administration (AA)

Business – General (AA)

Call Center Representative (CP)

E-Business (CP)

Entrepreneurship (CP)

Internet

Emphasis in Business Education (AA, CA)

Emphasis in Graphic Communication (AA, CA)

Retail Management (CA)

Salesperson – Retail (CP)

Business Management 103

Business Management (AA, CA)

Cabinet and Furniture Technology 104

Cabinetmaking and Furniture Design (AA, CA)

Cabinetmaking and Millwork (AA, CA)

Furniture Making (AA, CA)

Chemistry 109

Chemistry (AA, CA)

Chicano Studies 110

Child Development 111

Child Development Teacher (AA, CA)

Child Development Master Teacher (CA)

Child Development Site Supervisor (CA)

Chinese	113	Customer Service Academy	249
Cinema	114	Dance	128
Cinema (AA, CA)		Dance (AA, CA)	
		Dance Specialist for Children (CA)	
Communications	115	Dental Assisting	133
Computer Science and Information Systems	115	Dental Assisting/RDA (AA, CA)	
Cisco (CP)		Diesel Mechanics Technology	135
Computer Network Administration (AA)		Diesel Technology (AA, CA)	
Computer Science (AA, CA)		Diesel Mechanics Technology (ROP) ...	243
Desktop Support Specialist (CP)		Diesel Technology (AA, CA)	
Information Systems (AA, CA)		Disability Resource	136
Microsoft SQL Database Administrator (CP)		Drafting Technology	136
Microsoft Office User Specialist (CP)		Architectural Drafting Technology (AA, CA)	
Network Engineer (CP)		Computer Assisted Drafting (AA, CA)	
Oracle Database (CP)		Drafting Technology – Multimedia (AA, CA)	
UNIX Operating System (CP)		Drafting Technology – Technical (AA, CA)	
Video Game Artist (CP)		Electro-Mechanical Drafting and Design (AA, CA)	
Video Game Specialist (CP)		Interactive Media Design	
Visual Basic (CP)		Emphasis in 3D Modeling and Animation (AA, CA)	
Voice and Data Cable Installer (CP)		Emphasis in Multimedia Design (AA, CA)	
Web Developer		Drafting Technology (ROP)	244
Emphasis in Java/Open Source (CP)		Earth Sciences	141
Emphasis in Windows (CP)		Economics	141
Web Server Administrator		Economics (AA, CA)	
UNIX Emphasis (CP)		Education	142
Windows Emphasis (CP)		Electro-Mechanical Equipment Technician	142
Computer Science and Information Systems (ROP)	239	Electro-Mechanical Equipment Technician (CA)	
Applications Support Specialist (CP)		Electronics and Computer Hardware Technology	142
Computer Technology (AA, CA)		Advanced Electronic Technician (AA, CA)	
Microcomputer Operating Systems (CP)		Computer Hardware/Telecommunication Technician (AA, CA)	
Microcomputer Technology (CP)		Electronics Assembler (CP)	
PC Repair Technician (CP)		Emergency Medical Education	144
PC Support Technician (CP)		Paramedic Training (AA, CA)	
Software Applications Specialist (CP)		Engineering	146
Construction Inspection	124	Engineering (AA)	
Construction Inspection (AA, CA)		English	148
Construction Technology	124	English (AA)	
Continuing Education	248	English as a Second Language	150
Cooperative Education	124	Entertainment Technology	151
Counseling	125	Entertainment Technology (CP)	
Culinary Arts	126		
Culinary Arts (AA, CA)			
Culinary Skills (CP)			
Patisserie and Baking (CP)			
Culinary Arts (ROP)	242		
Culinary Arts (AA, CA)			
Culinary Skills (CP)			
Patisserie and Baking (CP)			

Family and Consumer Sciences 152	Graphic Communications (ROP) 245
Family and Consumer Sciences – General (AA, CA)	
Fashion 153	Health 174
Fashion Design/Entry-Level (CA)	
Fashion Design/Technical (AA)	
Fashion Merchandising/Entry-Level (CA)	History 174
Fashion Merchandising Sales Associate (CP)	
Fashion Merchandising/Technical (AA)	Humanities 175
Fire Technology 156	Industrial Technology 175
Fire Technology (AA, CA)	
Foreign Languages 158	Institutional Food Service Training 176
(See <i>Arabic, Chinese, French, German, Italian, Japanese, Spanish, Tagalog</i>)	Child Nutrition General Assistant (CP)
	Child Nutrition Site Manager (AA, CA)
	Child Nutrition Substitute (CP)
	Child Nutrition Technical Assistant (CP)
	Dietetic Service Supervisor (AA, CA)
French 158	Interior Design 177
	Interior Design (AA, CA)
General Studies 159	International Business 179
General Studies	International Business (AA, CA)
Arts and Humanities Emphasis (AA)	
Science and Mathematics Emphasis (AA)	Italian 179
Social and Behavioral Sciences Emphasis (AA)	
Geography 160	Japanese 180
Geographic Information Systems (CP)	
Geology 161	Journalism 180
Geology (AA)	Journalism (AA, CA)
German 162	Judaic Studies 181
Graphic Communications 164	Legal Studies 181
Digital Animation, Compositing, and Music (CP)	Legal Studies (AA)
Digital Arts (CP)	
Digital Imaging (AA, CA)	Liberal Studies 182
Digital Media (CP)	Liberal Arts and Sciences (AA)
Digital Prepress Operator (CP)	
Digital Publishing (CP)	Library Technology 183
Digital Video (AA, CA)	Library Technology (AA, CA)
E-Commerce Design (CP)	
Electronic Publisher (CP)	Mathematics 185
Electronic Publishing (AA, CA)	Mathematics (AA)
Graphic Communications Management (AA, CA)	
Graphic Communications Production (AA, CA)	Medical Assisting 187
Interactive Media Design	Administrative Medical Assisting (AA, CA)
Emphasis in 3D Modeling and Animation (AA, CA)	Clinical Medical Assisting (AA, CA)
Emphasis in Multimedia Design (AA, CA)	
Interactive Web Multimedia and Audio (AA, CA)	Microbiology 188
Internet	
Business Education Emphasis (AA, CA)	Multicultural Studies 188
Graphic Communication Emphasis (AA, CA)	(See <i>Africana Studies, American Indian Studies, American Studies, Chicano Studies, Judaic Studies</i>)
Internet Publisher (CP)	
New Media Compositing, Authoring, and Distribution (AA, CA)	Music 189
Screen Printer (CP)	Digital Animation, Compositing, and Music (CP)
Screen Printing (AA, CA)	Kodaly Music Education (CP)
Video Game Artist (CP)	Music (AA)
Web Data Base Design (CP)	
Web Graphics (CP)	
Web Motion Graphics (CP)	

Nursing Education	194	Reading	220
Associate Degree Nursing/ADN (AA)		Real Estate	221
Associate Degree Nursing/LVN to RN (AA)		Escrow (AA, CA)	
Associate Degree Nursing/Diploma RN to ADN (AA)		Real Estate Appraisal License Preparation (CP)	
Oceanography	197	Real Estate Broker License Preparation (AA, CA)	
Office Information Systems	197	Real Estate Salesperson License Preparation (CP)	
Administrative Assistant (AA, CA)		Recreation	224
Data Entry Clerk (CP)		Outdoor Leadership (AA, CA)	
International Administrative Assistant (AA, CA)		Recreation Agency Leader (AA, CA)	
Legal Secretary (AA, CA)		Regional Occupational Programs	238
Medical Office Specialist (AA, CA)		See:	
Medical Transcriptionist (AA, CA)		Air Conditioning, Heating, and Refrigeration (ROP)	
Office Assistant (CP)		Automotive Technology (ROP)	
Receptionist (CP)		Computer Science and Information Systems (ROP)	
Virtual Assistant (CP)		Culinary Arts (ROP)	
Optical Technology (ROP)	245	Diesel Mechanics Technology (ROP)	
Optical Technology (CP)		Drafting Technology (ROP)	
Paralegal Studies	201	Graphic Communications (ROP)	
Legal Support Assistant (CP)		Optical Technology (ROP)	
Parks and Recreation Management	203	Upholstery (ROP)	
Parks and Recreation Management (AA, CA)		Religious Studies	224
Philosophy	204	Sociology	225
Photography	205	Spanish	226
Commercial Photography (CP)		Speech	228
Digital Imaging (AA, CA)		Speech Communication (AA)	
Fine Art Photography (CP)		Surveying	229
Photography (AA, CA)		Surveying (AA, CA)	
Physical Education	207	Tagalog	229
Adult Fitness/Health Management (CA)		Theatre Arts	230
Physical Education (AA)		Theatre Arts (AA)	
Physical Science	212	Theatre Arts Emphasis in Acting (AA)	
Physics	212	Theatre – Technical (CA)	
Political Science	214	Upholstery (ROP)	246
Psychology	214	Automotive Upholstery (CP)	
Psychological and Social Services (AA, CA)		Upholstery (CP)	
Public Administration	216	Wastewater Technology Education	232
Public Administration (AA, CA)		Wastewater Technology Education (AA, CA)	
Public Works Management	217	Water Technology Education	233
Public Works Management (AA, CA)		Water Technology Education (AA, CA)	
Quality Assurance Technology	217	Welding	235
Quality Assurance Technology (AA, CA)		Entry-Level Gas Metal/Flux Cored Arc Welding (CP)	
Radio and Television	218	Entry-Level Gas Tungsten Arc Welding (CP)	
Digital Media (CP)		Entry-Level Shielded Metal Arc Welding (CP)	
Digital Video (AA, CA)		Welding Technology (AA, CA)	
Radio and Television (AA, CA)		Women's Studies	236
		Women's Studies (AA)	
		Zoology	236

Course Information

Students are held responsible for understanding and fulfilling all requirements presented herein, and for understanding and fulfilling any changes in those requirements which may have occurred since the printing of the catalog. Students are advised to check at the division or department levels for these changes.

Course Numbering System

Palomar College operates on a semester system. The course numbering system has meaning with regard to level and transfer. The college numbering system, effective summer 1990, is as follows:

1 – 49: Remedial or college preparatory courses which do not apply toward an A.A. degree and which are not intended for transfer to another community college or four-year college or university.

50 – 99: Courses which apply toward an AA degree but which are not intended for transfer to a four-year college or university.

100 – 299: Courses which count toward an AA degree and/or are intended for transfer to a four-year college or university (refer to Transfer Identification below). Freshman-level courses are generally given numbers from 100 – 199, and sophomore-level courses are generally given numbers from 200 – 299.

Courses numbered 100 through 299 are intended as lower division transferable course work. The final decision in regard to transferability rests with the institution to which the credits are transferred.

Numbers in parentheses indicate the units granted for a course.

Transfer Identification

Courses at Palomar College which transfer to public four-year universities in California are identified at the beginning of each course description with the abbreviation CSU and/or UC.

The notation CSU means the course will transfer to the 23 campuses of the California State University system.

The notation UC means the course will transfer to the 9 campuses of the University of California system.

California Articulation Number (CAN) System

The California Articulation Number System is one of several intersegmental projects designed to aid students in transferring between California's higher education campuses without loss of time, credit, or duplication of effort.

The California Articulation Number (CAN) system provides a cross-reference number for courses which have been evaluated by faculty and determined to be acceptable "in lieu of" each other. Only lower division, transferable, major preparation courses commonly taught on two- and four-year college and university campuses are included in the system.

The California Articulation Number System is not a common numbering system. Each campus retains its own course numbers, prefixes, and titles. The CAN (e.g. CAN ENGL 2) is listed parenthetically in catalog descriptions.

The CAN designation is assurance that the course or sequence of courses will be accepted in lieu of an identically designated course or sequence at all participating campuses in California.

Please note that the University of California (UC) campuses do not accept California Articulation Numbers (CAN).

Course lists may be found in the College Catalog and on the internet at www.cansystem.org.

CAN Courses

Following is a list of Palomar College courses qualified in the CAN system at the time of catalog publication (subject to change).

Palomar College Course

ACCT 103+104
ACCT 108
ACCT 103+104+108
AJ 100
ANTH 100
ANTH 105
ANTH 110
ART 102
ART 104
ART 105
ART 120
ART 130
ART 135
ART 165
ART 166
ART 165+166
ART 220
ART 260
BIOL 100 or 101+101L
BOT 100
BUS 115
BUS 117
CHEM 100
CHEM 105
CHEM 100+105
CHEM 110+110L
CHEM 115+115L
CHEM 110+110L+115+115L
CHEM 210
CHIN 101+102
COMM 100
CSIS 220
ECON 101
ECON 102
ENG 100
ENG 205
ENG 100+205
ENG 210
ENG 211
ENG 210+211
ENG 225
ENG 226
ENG 225+226
ENGR 210
ENGR 235
ENGR 245
FASH 105
FASH 110
FCS 165 OR HE 165
FREN 101
FREN 102
FREN 101+102
FREN 201
FREN 202
FREN 201+202
GEOG 100
GEOG 105
GEOL 100
GEOL 100+100L

CAN Course

CAN BUS 2
CAN BUS 4
CAN BUS SEQ A
CAN AJ 2
CAN ANTH 2
CAN ANTH 4
CAN ANTH 6
CAN ART 8
CAN ART 14
CAN ART 16
CAN ART 24
CAN ART 20
CAN ART 6
CAN ART 2
CAN ART 4
CAN ART SEQ A
CAN ART 10
CAN ART 12
CAN BIOL 2
CAN BIOL 6
CAN BUS 8
CAN BUS 12
CAN CHEM 6
CAN CHEM 8
CAN CHEM SEQ B
CAN CHEM 2
CAN CHEM 4
CAN CHEM SEQ A
CAN CHEM 12
CAN CHIN SEQ A
CAN JOUR 4
CAN CSCI 12
CAN ECON 2
CAN ECON 4
CAN ENGL 2
CAN ENGL 4
CAN ENGL SEQ A
CAN ENGL 8
CAN ENGL 10
CAN ENGL SEQ B
CAN ENGL 14
CAN ENGL 16
CAN ENGL SEQ C
CAN ENGR 12
CAN ENGR 8
CAN ENGR4
CAN FCS 20
CAN FCS 6
CAN FCS 2
CAN FREN 2
CAN FREN 4
CAN FREN SEQ A
CAN FREN 8
CAN FREN 10
CAN FREN SEQ B
CAN GEOG 2
CAN GEOG 4
CAN GEOL 6
CAN GEOL 2

GERM 101	CAN GERM 2
GERM 102	CAN GERM 4
GERM 101+102	CAN GERM SEQ A
GERM 201	CAN GERM 8
GERM 202	CAN GERM 10
GERM 201+202	CAN GERM SEQ B
HIST 101	CAN HIST 8
HIST 102	CAN HIST 10
HIST 101+102	CAN HIST SEQ B
HIST 105	CAN HIST 2
HIST 106	CAN HIST 4
HIST 105+106	CAN HIST SEQ A
JAPN 101+102	CAN JAPN SEQ A
JOUR 101	CAN JOUR 2
MATH 100	CAN MATH 2
MATH 105	CAN MATH 4
MATH 110	CAN MATH 10
MATH 115	CAN MATH 8
MATH 120	CAN STAT 2
MATH 130	CAN MATH 30
MATH 135	CAN MATH 16
MATH 140	CAN MATH 18
MATH 141	CAN MATH 20
MATH 140+141	CAN MATH SEQ B
MATH 200	CAN MATH 26
MATH 205	CAN MATH 22
MATH 140+141+205	CAN MATH SEQ C
MATH 206	CAN MATH 24
MICR 200	CAN BIOL 14
MUS 105	CAN MUS 2
MUS 106	CAN MUS 4
MUS 105+106	CAN MUS SEQ A
PHIL 100	CAN PHIL 4
PHIL 101	CAN PHIL 2
PHIL 120	CAN PHIL 6
PHOT 100	CAN ART 18
PHYS 120	CAN PHYS 2
PHYS 121	CAN PHYS 4
PHYS 120+121	CAN PHYS SEQ A
PHYS 230	CAN PHYS 8
PHYS 231	CAN PHYS 12
PHYS 232	CAN PHYS 14
PHYS 230+231+232	CAN PHYS SEQ B
PSYC 100	CAN PSY 2
PSYC 205 OR SOC 205	CAN PSY 6
PSYC 210	CAN PSY 10
SOC 100	CAN SOC 2
SOC 110	CAN SOC 4
SPAN 101	CAN SPAN 2
SPAN 102	CAN SPAN 4
SPAN 101+102	CAN SPAN SEQ A
SPAN 201	CAN SPAN 8
SPAN 202	CAN SPAN 10
SPAN 201+202	CAN SPAN SEQ B
SPCH 100	CAN SPCH 4
SPCH 105	CAN SPCH 6
SURV 100+101	CAN ENGR 10
ZOO 100	CAN BIOL 4
ZOO 200	CAN BIOL 10
ZOO 203	CAN BIOL 12
ZOO 200+203	CAN BIOL SEQ B

Accounting (ACCT)

See also Business Education

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.

PROGRAMS OF STUDY

Accounting

Equips students with the skills necessary for employment as a full-charge bookkeeper or an accounting technician.

A.A. Degree Major or Certificate of Achievement

Program Requirements	Units
ACCT 103 Financial Accounting	4
ACCT 104 Acct Electronic Spreadsheet Lab	1
ACCT 105 and Income Tax	3
ACCT 106 or State Income	1
ACCT 107 Taxation of Business Entities	4
ACCT 108 Managerial Accounting	4
ACCT 110 QuickBooks	2
ACCT 115 Sales/Payroll Tax/and Employee Benefits	2
ACCT 120 Financial Statement Analysis	3
BUS 110 Business Mathematics	3
BUS 115 Business Law	3
BUS 125 or Business English	
BUS 205 Business Writing	3
CSIS 105 or Computer Concepts/Microcomputer	
CSIS/RCSIS 120 Microcomputer Applications	3
TOTAL UNITS	32

Recommended Electives: BUS 100, 116, 140; OIS 101, 115; CE 100

Bookkeeping/Accounting Clerk

Provides a program to prepare the student for an entry-level Bookkeeping/Accounting Clerk position.

Certificate of Proficiency

Program Requirements	Units
ACCT 103 and Financial Accounting	4
ACCT 104 or Acct Electronic Spreadsheet Lab	1
BUS 105 Bookkeeping Fundamentals	3
ACCT 110 QuickBooks	2
ACCT 115 Sales Tax, Payroll Taxes, and Employee Benefits	2
TOTAL UNITS	7 - 9

COURSE OFFERINGS

ACCT 103 Financial Accounting (4)

4 hours lecture

Corequisite: ACCT 104

Transfer acceptability: CSU; UC; ACCT 103+104=CAN BUS 2

Financial accounting theory, principles, and procedures. Application of theory and practice to the accounting cycle and to systems design. An emphasis on both the preparer and the information user will be stressed.

ACCT 104 Accounting Electronic Spreadsheet Laboratory (1)

2 hours lecture/laboratory

Corequisite: ACCT 103

Transfer acceptability: CSU; ACCT 103+104=CAN BUS 2

Application of fundamental spreadsheet concepts, principles, and commands in working with templates and modeling problems in accounting principles.

ACCT 105 Income Tax (3)

3 hours lecture

Transfer acceptability: CSU

Instruction on income tax legislation and procedure, income tax

problems, and practice in completing forms as required by the Internal Revenue Service.

ACCT 106 State Income Tax (1)

1 hour lecture

Prerequisite: Completion of, or concurrent enrollment in, ACCT 105

Transfer acceptability: CSU

A study of the major differences between the State and Federal income tax regulations.

ACCT 107 Taxation of Business Entities (4)

4 hours lecture

Transfer acceptability: CSU

Taxation from a business entities approach including business deductions, losses, property transactions, and tax credits. Topics will include rules related to corporations, partnerships, and S corporations.

ACCT 108 Managerial Accounting (4)

4 hours lecture

Prerequisite: ACCT 103

Transfer acceptability: CSU; UC; CAN BUS 4

Accounting theory, principles, and procedures for financial statement analysis, decentralized operations, cost concepts, cost accounting, budgeting, standard costing, cost-profit-volume analysis, accounting control, differential analysis, capital budgeting, variable and absorption costing, responsibility accounting, capital investment analysis, and income taxes.

ACCT 110 QuickBooks (2)

4 hours lecture/laboratory

Prerequisite: ACCT 103 or 203, or BUS 105

Transfer acceptability: CSU

Applying the computer in the study of accounting principles with emphasis on planning and analysis. Students prepare data and enter accounting transactions, which are used as input for QuickBooks Pro in order to yield the various accounting statements as output.

ACCT 115 Sales Tax, Payroll Taxes, and Employee Benefits (2)

2 hours lecture

Transfer acceptability: CSU

Provides the students with a knowledgeable background in all phases and aspects of sales tax and payroll accounting. Surveys the various tax procedures required by the employer and employee in filing the correct forms for social security, and federal and state income tax returns. Worker's compensation and state disability benefits will be discussed, as well as pensions, health plans, vacation and sick leave, and other employee benefits.

ACCT 120 Analysis of Financial Statements (3)

3 hours lecture

Prerequisite: ACCT 103

Transfer acceptability: CSU

Exploration of the characteristics of financial statements and analysis of reported results from such statements. How to apply ratios to financial statements and to interpret outcomes in order to draw various inferences and/or conclusions from the results.

ACCT 197 Accounting 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 Accounting. See Class Schedule for specific topic offered. Course title will designate subject covered.

ACCT 203 Survey of Accounting (4)

4 hours lecture

Corequisite: ACCT 204

Transfer acceptability: CSU

Introduction to the core primary accounting areas: financial, managerial, taxation, auditing, and accounting information systems. Each area is introduced in terms of its background, conceptual basis, and application in the business environment.

ACCT 204 Financial/Managerial Accounting Spreadsheet Lab (1)*2 hours lecture/laboratory***Corequisite:** ACCT 203**Transfer acceptability:** CSU

Application of fundamental spreadsheet concepts, principles, and commands in working with templates and modeling problems in financial and managerial accounting problems.

ACCT 205 Cost Accounting (3)*3 hours lecture***Prerequisite:** ACCT 108**Transfer acceptability:** CSU

A study of the fundamental principles of cost accounting, including the elements of production costs, cost estimations, byproducts and joint products, spoilage and scrap materials, and systems of cost distribution such as standard cost, job order, and process flow.

Administration of Justice (AJ)

Contact Public Safety Programs for further information, (760) 744-1150, ext. 1722. 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**Administration of Justice–Law Enforcement****A.A. Degree Major**

Program Requirements		Units
AJ 100	Introduction to Criminal Justice	3
AJ 101	Criminal Evidence	3
AJ 102	Criminal Procedures	3
AJ 103	Community Relations	3
AJ 104	Criminal Law	3
AJ 110	Basic Criminal Investigation	3
AJ 115	Patrol Procedures	3
AJ 131	Juvenile Justice	3
AJ 180	Criminology	3
CE 100	Cooperative Education	3
Electives (Select 6 units)		
AJ 50	POST Perishable Skills	.5
AJ 51	First Aid/CPR Update	.5
AJ 52	Racial Profiling	.5
AJ 53	Instructor Development	2.5
AJ 72	Police Academy Orientation and Leadership	3
AJ 97	Topics in Administration of Justice	.5-20
AJ 135	Traffic Control	3
AJ 140	C J/21 st Century-Field Study	2.5
AJ 175	Narcotics	3
AJ 197	Topics in Administration of Justice	.5-6
AJ 210	Basic Crime Scene Forensic Science	3
AJ 211	Fingerprint Identification	3
AJ 296	Special Projects	1.2-3
TOTAL UNITS		36

Basic Police Academy

The Basic Police Academy Certificate of Achievement is a series of courses which when combined satisfy mandated training requirements for a California Basic Peace Officers Standards and Training (P.O.S.T.) certificate. The program is certified and prepares the student for work as a law enforcement officer in the State of California.

Admission to the program is by special application. To be eligible for consideration, the applicant must (1) be free of felony conviction or conviction of a misdemeanor which prohibits possession of a firearm, (2) be eligible for English

50, (3) possess a valid driver's license, (4) pass written, oral and physical fitness examinations, (5) pass a medical examination, (6) be 18 years old, and (7) pass Department of Justice clearance.

In addition to passing the required college examinations, the student must obtain passing scores on each P.O.S.T. Learning Domain Examination, and all skills/lab portions of the Academy.

Each block must be completed in sequential order within the same Academy.

Certificate of Achievement

Program Requirements		Units
AJ 90	Basic Police Academy I	20
AJ 91	Basic Police Academy II	18.5
AJ 92	Basic Police Academy III	19
TOTAL UNITS		57.5

COURSE OFFERINGS

Courses numbered under 100 are not intended for transfer credit.

AJ 50 POST Perishable Skills (.5)*1 ½ hours laboratory*

Prerequisite: Must be an active full time peace officer or active duty reserve peace officer and currently employed by a law enforcement agency.

Recommended preparation: Law enforcement field experience

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

A POST-approved perishable skills course for active full time peace officers or active reserve peace officers that are currently employed by a law enforcement agency. This course covers tactical firearms, driver training/awareness, arrest and control, tactical communications, and interpersonal communication skills. This course meets the POST Continuing Professional Training (CPT) requirements.

AJ 51 First Aid/CPR Update (.5)*½ hour lecture*

Prerequisite: Must be an active full time peace officer or active reserve peace officer and currently employed by a law enforcement agency.

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

A POST-approved perishable skills course for active full time peace officers or active reserve peace officers that are currently employed by a law enforcement agency. This course is an overview of emergency medical care terminology and procedures required for peace officers when responding to victims where assessment of treatment and possible basic life support maneuvers will be required.

AJ 52 Racial Profiling (.5)*½ hour lecture*

Prerequisite: Must be an active full time peace officer or active reserve peace officer and currently employed by a law enforcement agency

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

A POST-approved course for active full time peace officers or active reserve peace officers that are currently employed by a law enforcement agency. This course clarifies what constitutes racial profiling, conceptually and legally.

AJ 53 Instructor Development (2.5)*2 ½ hours lecture*

Prerequisite: Must have successfully completed a POST Certified Basic Police Academy, and/or is a subject matter expert on a topic that is taught in the Basic Course

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

A POST-approved course that is designed to develop competency in the following areas: role and responsibility of the basic course instructor, adult learning principles, lesson planning, presentation skills, facilitation skills, learning resources and evaluation methods. This program consists of 40 hours of instruction and competency demonstration.

AJ 65 Preparation for Law Enforcement (3)

3 hours lecture

Note: Credit/No Credit grading only

This course will provide an educational overview of the hiring process of law enforcement agencies and prepare the serious candidate for law enforcement employment to successfully complete the pre-employment testing and screening process. It will take the student from the written test all the way through to the oral interview.

AJ 72 Police Academy Orientation and Leadership (3)

3 hours lecture

Note: Credit/No Credit grading only

The development of critical thinking and physical fitness skills that lead to successful completion of the Police Academy program.

AJ 75 Spanish for Law Enforcement (3)

3 hours lecture

Basic conversational Spanish with emphasis on law enforcement situations.

AJ 80 Vehicle Operations (1)

2 hours lecture/laboratory

Students will learn how to prevent vehicle collisions; basic defensive driving principles and techniques in order to develop safe driving habits. The successful student will become proficient in the actual operation of the vehicle, and knowledgeable about the dynamic forces at work.

AJ 82 First Aid for Law Enforcement (1.5)

1 ½ hours lecture

An overview of emergency medical care terminology and procedures required for peace officers when responding to victims where assessment of immediate condition, appropriate first aid treatment and possible basic life support maneuvers will be required.

AJ 90 Basic Police Academy I (20)

18.5 hours lecture; 4.5 hours laboratory

Note: May not be taken for Credit/No Credit Grading. May be taken 4 times.

Block 1 of the Basic Police Academy Certificate of Achievement is a series of major objectives which when combined satisfy mandated training requirements for California Basic Peace Officers Standards and Training (P.O.S.T.) certificate. The program is certified and prepares the student for work as a law enforcement officer in the State of California.

AJ 91 Basic Police Academy II (18.5)

15.5 hours lecture; 9 hours laboratory

Prerequisite: Successful completion of AJ 90 with "C" or better.**Note:** May not be taken for Credit/No Credit Grading. May be taken 4 times.

Block 2 of the Basic Police Academy Certificate of Achievement is a continuation in a series of major objectives which when combined satisfy mandated training requirements for California Basic Peace Officers Standards and Training (P.O.S.T.) certificate. The program is certified and prepares the student for work as a law enforcement officer in the State of California.

AJ 92 Basic Police Academy III (19)

16 hours lecture; 9 hours laboratory

Prerequisite: Successful completion of AJ 91 with "C" or better.**Note:** May not be taken for Credit/No Credit Grading. May be taken 4 times.

Block 3 of the Basic Police Academy Certificate of Achievement is the culmination of a series of major objectives which when combined satisfy mandated training requirements for California Basic Peace Officers Standards and Training (P.O.S.T.) certificate. The program is certified and prepares the student for work as a law enforcement officer in the State of California.

AJ 97 Topics in Administration of Justice .5 - 20

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 not be taken for Credit/No Credit Grading. May be taken 4 times.

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

AJ 100 Introduction to Criminal Justice (3)

3 hours lecture

Transfer acceptability: CSU; UC; CAN AJ 2

A comprehensive overview of the American Criminal Justice System. History, theories, and philosophy of the three parts of the criminal justice system including law enforcement, courts, and corrections. Relevant sociological and economic issues, past and present, will be addressed.

AJ 101 Criminal Evidence (3)

3 hours lecture

Transfer acceptability: CSU

The kinds and degrees of evidence and the rules governing the admissibility of evidence in court.

AJ 102 Criminal Procedures (3)

3 hours lecture

Transfer acceptability: CSU

Review of the criminal justice system; criminal procedures from incident to final disposition; principles of constitutional, federal, and state laws as they apply to, and affect the administration of justice.

AJ 103 Community Relations (3)

3 hours lecture

Transfer acceptability: CSU; UC

A study of the role of law enforcement and justice system participants. The expectations and interrelationships between the various agencies and the public view/role toward establishing positive relationships. An overview of communication skills and the interaction between the criminal justice system and the multicultural society will be presented. Hate crimes, as well as prejudice, bias, and discrimination will be addressed.

AJ 104 Criminal Law (3)

3 hours lecture

Transfer acceptability: CSU; UC

Historical development, philosophy, and constitutional provisions of law. Definitions, classification of crimes, study of case law, and concepts of the law as a social force.

AJ 105 Criminal Evidence and Procedures (3)

3 hours lecture

Transfer acceptability: CSU

An overview of the criminal justice system; laws of arrest, rules of evidence, search and seizure, and juvenile procedures.

AJ 110 Basic Criminal Investigation (3)

3 hours lecture

Transfer acceptability: CSU

Fundamentals of investigation, search, collection and preservation of physical evidence, scientific aids, modus operandi, source of information, interviews and interrogations, and incident reporting.

AJ 114 Report Writing (3)

3 hours lecture

Documentation of criminal and civil incidents. Basic crime and traffic reports will be addressed. Narrative reporting will be emphasized.

AJ 115 Patrol Procedures (3)

3 hours lecture

Responsibilities, techniques, and methods of police patrol.

AJ 117A Patrol Tactics 1 (3)

3 hours lecture

Specific types of circumstances encountered by patrol officers including disabled persons, gangs, controlled substances, missing persons, weapons laws, hazardous materials, and custody are included in this course.

AJ 117B Patrol Tactics 2 (4)

4 hours lecture

Specific types of circumstances encountered by patrol officers including patrol methods, vehicle stops, and unusual occurrences are included in this course.

AJ 117C Patrol Tactics 3 (3)
3 hours lecture
 Specific types of circumstances encountered by patrol officers including crimes in progress, domestic violence, emotional situations, and disputes are included in this course.

AJ 117D Patrol Tactics 4 (2)
1 hour lecture-2 hours lecture/laboratory
 Scenarios depicting circumstances encountered by patrol officers will be performed by students in an examination atmosphere and then debriefed by students and staff.

AJ 118A Basic Firearms (2)
1 hour lecture-2 hours lecture/laboratory
 Principles of firearm safety, ballistics, and legal aspects of weapons. Fundamentals of marksmanship. Proficiency with revolver, pistol, and shotgun will be required.

AJ 118B Tactical Firearms (1)
2 hour lecture/laboratory
 Fundamentals of firearms as they pertain to law enforcement activities. Tactical usage and marksmanship will be stressed. Use of chemical agents will also be included.

AJ 119A Law Enforcement Procedures Review 1 (.5)
1 hour lecture/laboratory
 Review of criminal procedures as they are applied by the police officer.

AJ 119B Law Enforcement Procedures Review 2 (.5)
1 hour lecture/laboratory
 Review of criminal laws as they are applied by the police officer.

AJ 119C Law Enforcement Procedures Review 3 (.5)
1 hour lecture/laboratory
 Review of enforcement procedures as applied by the police officer.

AJ 120 Defensive Tactics (3)
6 hours lecture/laboratory
 Protection against persons armed with dangerous weapons; demonstration and drill in a limited number of holds and come-alongs; restraint of prisoners and the mentally ill; moral obligations; and fundamental use of the baton.

AJ 122 Police Fitness (1)
2 hours lecture/laboratory
 Life-long fitness techniques involving aerobic, strength, and flexibility programs will be emphasized.

AJ 131 Juvenile Justice (3)
3 hours lecture
 The organization, functions, and jurisdiction of juvenile agencies; the processing and detention of juveniles; juvenile case disposition; juvenile statutes and court procedures. Includes youth subcultures and delinquency and the varied philosophies underlying their existence.

AJ 135 Traffic Control (3)
3 hours lecture
 Traffic law enforcement; traffic control; fundamentals of traffic accident investigation; California Vehicle Code.

AJ 140 Criminal Justice in the 21st Century—Field Study (2.5)
5 hours lecture/laboratory
 This course will be a study of local, state and federal courts, correctional institutions and law enforcement departments. Knowledge will be obtained by site visitations, personal interviews and tours.

AJ 141 Enforcement Psychology (3)
3 hours lecture
 Designed to assist the peace officer's understanding of the psychological dilemma of law enforcement. Victimology, diversity, politics, and the tactical aspect of the criminal justice system will be evaluated from a psychological perspective.

AJ 175 Narcotics (3)
3 hours lecture
 A survey of laws and specific characteristics pertaining to hallucinogens, narcotics, marijuana, alcohol, and poisonous substances. It is designed to give the student conceptual insight into contemporary problems of vice, drugs, and legal social issues related to dangerous drugs.

AJ 180 Criminology (3)
3 hours lecture
Transfer acceptability: CSU
 A general study of crime, the science of crime and criminal behavior, the forms of criminal behavior and the causes of crime. Crime theories and sociological causes of crime, types of crime, and issues of criminal behavior will also be addressed.

AJ 197 Topics in Administration of Justice (.5-6)
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 Administration of Justice. See Class Schedule for specific topic offered. Course title will designate subject covered.

AJ 210 Basic Crime Scene Forensic Science (3)
3 hours lecture
 Introduces various specialized disciplines including the crime lab functions, forensic instrumentation, forensic photography, crime scene processing, drug analysis, hair and fiber analysis, questioned documents, and fingerprint usage.

AJ 211 Fingerprint Identification (3)
3 hours lecture
 This course reviews the history and application of fingerprinting for personal identification including recognition of patterns and classification of fingerprints. The student will also experience practical problems involving locating, developing, lifting and photographing latent prints. Courtroom testimony and exhibits will also be covered.

AJ 212 Forensic Photography (3)
3 hours lecture
 Techniques utilized in police photography are outlined and explored including crime scene and traffic collision photography, macro photography, microphotography, black/white and color photography, and photography equipment. Also discussed are topics such as low light or existing light photography, high speed film shooting, use of alternative light sources in photography, aerial photography, video recording, and presentation of photographic exemplars in court or trial.

Aeronautical Sciences (AERO)

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

Aeronautical Operations and Management

For students interested in the business or piloting aspects of aviation. Transfers to some four-year programs in this field.

A.A. Degree Major or Certificate of Achievement

Program Requirements		Units
AERO 100	Introduction to Aeronautical Sciences	3
AERO 105	Basic Pilot Ground School	3

AERO 115	Air Traffic Control	3
AERO 120	Aviation Weather	3
BUS 205	Business Writing	3
ECON 101	Principles of Economics (Macro)	3
ECON 102	Principles of Economics (Micro)	3

Elective Courses (Select 15 units minimum)

ACCT 103 and	Financial Accounting	4
ACCT 104	Acct Electronic Spreadsheet Lab	1
AERO 106	Commercial Pilot Ground School	3
AERO 107	Instrument Pilot Ground School	3
AERO 108	Flight Instructor Ground School	3
AERO 125	Instrument Simulator Lab	1.5
AERO 150	Airport Management	3
AERO 205	Principles of Aerodynamics	3
AERO 210	Aviation Safety and Accident Investigation	3
AERO 260	ATP/Dispatcher Ground School	3
BUS 155	Marketing	3
BUS 115	Business Law	3
BMGT 110	Human Resource Management	3
BMGT 115	Organizational Theory and Design	3
CE 100	Cooperative Education	1,2,3,4
CSIS 105	Computer Concepts/Microcomputer Apps.	3
GEOG 110	Meteorology: Weather and Climate	3
MATH 115	Trigonometry	3
MATH 120	Elementary Statistics	3
PHYS 120	General Physics	4
PHYS 121	General Physics	4
TOTAL UNITS		36

Flight training is the sole responsibility of each student and is contracted with an F.A.A. approved flight school at the student's own expense. The Palomar Community College District accepts no responsibility or liability for the student's flight training program.

Aircraft Commercial Pilot

Prepares students for employment as commercial pilots in air taxi and other field-related flying operations. Transfers to some four-year programs in this field.

A.A. Degree Major or Certificate of Achievement

Program Requirements		Units
AERO 75	Private Pilot Certification	2
AERO 80	Instrument Rating Certification	2
AERO 85	Commercial Pilot Certification	3
AERO 100	Introduction to Aeronautical Sciences	3
AERO 105	Basic Pilot Ground School	3
AERO 106	Commercial Pilot Ground School	3
AERO 107	Instrument Pilot Ground School	3
AERO 110	Basic Pilot Flight Procedures	2
AERO 115	Air Traffic Control	3
AERO 120	Aviation Weather	3
AERO 125	Instrument Simulator Laboratory	1.5
AERO 140	Aviation Math/ Modern Navigation	3
AERO 205	Principles of Aerodynamics	3
AERO 210	Aviation Safety and Accident Investigation	3
AERO 215	Complex Aircraft Systems and Propulsion	3
TOTAL UNITS		40.5

Recommended Electives: AERO 108, 150, 260; BUS 205; GEOG 110

Flight training is the sole responsibility of each student and is contracted with an F.A.A. approved flight school at the student's own expense. The Palomar Community College District accepts no responsibility or liability for the student's flight training program.

COURSE OFFERINGS

Courses numbered under 100 are not intended for transfer credit.

AERO 75 Private Pilot Certification (2)

Note: Credit/No Credit grading only

Upon presentation of a Private Pilot Certificate, the student will be

given credit (no grade). Flight training is to be completed off campus with an F.A.A. certified flight instructor of the student's choice and at the student's own expense. The Palomar Community College District accepts no responsibility or liability for the flight training obtained from private instructors. The student should register for this course in the semester during which the training is to be completed.

AERO 80 Instrument Rating Certification (2)

Note: Credit/No Credit grading only

Upon presentation of an Instrument Rating, the student will be given credit (no grade). Flight training is to be completed off campus with an F.A.A. certified flight instructor of the student's choice and at the student's own expense. The Palomar Community College District accepts no responsibility or liability for the flight training obtained from private instructors. The student should register for this course in the semester during which the training is to be completed.

AERO 85 Commercial Pilot Certification (3)

Note: Credit/No Credit grading only

Upon presentation of a Commercial Pilot Certificate, the student will be given credit (no grade). Flight training is to be completed off campus with an F.A.A. certified flight instructor of the student's choice and at the student's own expense. The Palomar Community College District accepts no responsibility or liability for the flight training obtained from private instructors. The student should register for this course in the semester during which the training is to be completed.

AERO 90 Multi-Engine Rating Certification (1)

Note: Credit/No Credit grading only

Upon presentation of a Multi-Engine Rating, the student will be given credit (no grade). Flight training is to be completed off campus with an F.A.A. certified flight instructor of the student's choice and at the student's own expense. The Palomar Community College District accepts no responsibility or liability for the flight training obtained from private instructors. The student should register for this course in the semester during which the training is to be completed.

AERO 100 Introduction to Aeronautical Sciences (3)

3 hours lecture

Transfer acceptability: CSU

A survey of the aerospace field including the functions and operations of various federal and state regulating aviation agencies and airport based companies such as air carrier, general aviation, aviation maintenance, flight schools, and other major occupational and supportive areas.

AERO 105 Basic Pilot Ground School (3)

3 hours lecture

Transfer acceptability: CSU

A study of Federal Aviation Regulations, flight data, aerodynamics, weather and navigation, radio communications, aircraft and engine operation, flight instruments, and aircraft performance. Prepares the student for the Federal Aviation Administration's Private Pilot written examination.

AERO 106 Commercial Pilot Ground School (3)

3 hours lecture

Prerequisite: Private Pilot Certificate or AERO 105 with concurrent or prior flight training

Transfer acceptability: CSU

A comprehensive study of aircraft performance, Federal Aviation Regulations, navigation, flight charts and graphs, radio navigation and communications, meteorology, emergency procedures, aerodynamics, flight instruments, and multi-engine procedure. Prepares the student for the Federal Aviation Administration's Commercial Pilot written examination.

AERO 107 Instrument Pilot Ground School (3)

3 hours lecture

Prerequisite: Private Pilot Certificate or AERO 105 with concurrent or prior flight training

Transfer acceptability: CSU

The rules and regulations for instrument flight, interpretation of flight instruments, air navigation, meteorology, instrument flight techniques, air traffic control, and flight planning. Prepares the student for the Federal Aviation Administration's Instrument written examination.

AERO 108 Flight Instructor Ground School (3)
3 hours lecture
Prerequisite: AERO 106 and 107
Transfer acceptability: CSU
 Learning characteristics, teaching techniques, student evaluation, instructor duties/responsibilities, and all private and commercial pilot maneuvers. Prepares the student for the Federal Aviation Administration's written and practical tests for flight instructor-airplane.

AERO 110 Basic Pilot Flight Procedures (2)
2 hours lecture
Prerequisite: Completion of, or concurrent enrollment in, AERO 105
Transfer acceptability: CSU
 A classroom study of procedures required for the private pilot practical test. Includes discussion of cross-country flight planning, radio navigation, communication procedures, controlled airspace, and airport operations.

AERO 115 Air Traffic Control (3)
3 hours lecture
Prerequisite: AERO 105
Transfer acceptability: CSU
 The national airspace system and the handling of air traffic within this area. Emphasis is placed on the operation of Federal Aviation Administration controlling agencies.

AERO 120 Aviation Weather (3)
3 hours lecture
Transfer acceptability: CSU
 Basic principles relating to weather with particular emphasis placed upon the relationship of weather to aviation. Practical instruction is given in the use and interpretation of weather reports, forecasts, and charts.

AERO 125 Instrument Simulator Laboratory (1.5)
1 hour lecture-2 hours laboratory
Prerequisite: Private Pilot Certificate
Note: May be taken 3 times for increased proficiency by utilizing more advanced lesson plans and taped lesson plans in the lab.
Transfer acceptability: CSU
 Instrument flight including VOR navigation, holding patterns, and ILS, LOC, NDB, and VOR approaches through use of a ground trainer.

AERO 140 Aviation Mathematics and Modern Navigation Systems (3)
3 hours lecture
Transfer acceptability: CSU
 The nature and properties of numbers and arithmetic operations utilizing the flight computer for improvement in operational efficiency and applications involving all forms of air navigation. Basic principles of modern navigation systems such as Loran, INS/IRS, R-NAV, TCAS, GPWS, Flight Directors, and GPS will be examined.

AERO 150 Airport Management (3)
3 hours lecture
Transfer acceptability: CSU
 Airports and their management. Planning, finance, economics, operation, maintenance, and public relations will be discussed as well as current topics.

AERO 197 Aeronautical Sciences 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 Aeronautical Sciences. See class schedule for specific topic covered. Course title will designate subject covered.

AERO 205 Principles of Aerodynamics (3)
3 hours lecture
Transfer acceptability: CSU
 Introduction to the theory of flight; applications of the basic laws of physics to the principles of flight. Aircraft design is considered with respect to airfoils, wings, viscous effects, propellers, and aircraft performance.

AERO 210 Aviation Safety and Accident Investigation (3)
3 hours lecture
Prerequisite: AERO 105 or Private Pilot Certificate
Transfer acceptability: CSU
 Accident prevention principles through a study of recent mishaps. Pilot physical and psychological factors and their role in mishaps. A study of crash survival and post-crash survival techniques. Fundamentals of mishap investigation and reporting.

AERO 215 Complex Aircraft Systems and Propulsion (3)
3 hours lecture
Prerequisite: AERO 105 or Private Pilot Certificate
Transfer acceptability: CSU
 Turbochargers, turboprop and turbojet engines and their operation. Electrical, pressurization, hydraulic, and fuel systems will be examined.

AERO 260 ATP/Dispatcher Ground School (3)
3 hours lecture
Prerequisite: Commercial Pilot Certificate
Transfer acceptability: CSU
 Federal Aviation Regulations, aerodynamics, performance, flight procedures, aviation weather, and aeromedical factors as they apply to the operation and dispatch of air carrier transport aircraft. Prepares the student for the Federal Aviation Administration's Airline Transport Pilot or Dispatcher written/knowledge examination.

AERO 295 Directed Study in Aeronautical Sciences (1,2,3)
3, 6, or 9 hours field work
Prerequisite: AERO 100 and approval of project proposal
Note: May be taken 4 times
 Individual study in field or library within the field of air transportation.

Africana Studies (AS)

See also Multicultural Studies

Contact the Multicultural Studies Department for further information, (760) 744-1150, ext. 2206. 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

Africana Studies

Provides background for upper division course work in Africana Studies and a complementary base for students interested in many areas and professions including: Business Administration, Child Development, Law Enforcement, General Studies, Journalism, Liberal Arts and Sciences, Nursing, Radio and Television.

Certificate of Proficiency

Program Requirements		Units
AS 100	Intro/Hist Legacy/Africana	3
AS 115	Intro/Comparative Africana Lit	3
AS 116	Intro Literature/Arts Africana	3
AS 120	Africana Social Institutions	3
AS 125	Africana People/World Politics	3
TOTAL UNITS		15

COURSE OFFERINGS

AS 100 Introduction to the Historical Legacy of Africana Peoples (3)
3 hours lecture
Transfer acceptability: CSU; UC
 The ancient and modern histories and civilizations of Africana peoples. An emphasis on the Africana presence and impact on global historical processes.

AS 101 African-American History I (3)

3 hours lecture

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

Transfer acceptability: CSU; UC - maximum credit for one pair: AS 101-102 or HIST 101-102

African-Americans in the history of the United States from Africa through Reconstruction with particular emphasis on the trans-Atlantic slave trade; the colonial period; the Revolution; constitutional development; development of the plantation system, slavery on and off the plantation; the free Negro in the North and South; westward expansion and frontier influences; emergence of sectionalism, the anti-slavery movement; impact of, and contributions to, the Civil War; Reconstruction and post-war adjustments; Black leadership; and the antebellum legacy.

AS 102 African-American History II (3)

3 hours lecture

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

Transfer acceptability: CSU; UC - maximum credit for one pair: AS 101-102 or HIST 101-102

Cultural, economic, and political development of African-Americans in the United States since Reconstruction. Emphases on post-Civil War difficulties; the Westward Movement; expressions of cultural identity; industrial development; impact of World Wars I and II on urbanization and social mobility; expansion of government activity; Civil Rights Era and modern militancy; Black leadership, and the United States as a world power.

AS 110 The Black and the United States Political System (3)

3 hours lecture

Transfer acceptability: CSU; UC - maximum credit for one course: AS 110, AIS 102, CS 102

Surveys the role of Black people in the United States political system and institutions. Examines the structure and functions of the American political system in relation to issues which affect the American people as a whole and minority groups in particular. A description and analysis of Federal, State, and local government organizations as they relate to the group will be emphasized.

AS 115 Introduction to Comparative Africana Literature (3)

3 hours lecture

Transfer acceptability: CSU; UC

Selected literatures of Africana peoples. Examination of the principles of aesthetics, theme, philosophy and religion, and the impact of cross-cultural exchanges on the literature.

AS 116 Introduction to the Literature and Arts of Africana Civilizations (3)

3 hours lecture

Transfer acceptability: CSU; UC

Continuum in the development of African and Africana literature and other arts from Ancient Africa to the present. Cross-cultural exchanges affecting artistic and literary evolution.

AS 120 Introduction to Africana Social Institutions and Behavior (3)

3 hours lecture

Transfer acceptability: CSU; UC

Social institutions and their influence on the behavior of Africana peoples. Analysis of facts, principles, and concepts basic to understanding human behavior.

AS 125 Africana Peoples and the World Political Economy (3)

3 hours lecture

Transfer acceptability: CSU; UC

Socio-political economic institutions and forces operative in the Africana world. Analysis of the economic and political motives based in the slave trade, colonialism, and underdevelopment.

AS 126 Cultures of Africa (3)

3 hours lecture

Note: Cross listed as ANTH 126.

Transfer acceptability: CSU; UC

Introduction to the indigenous peoples and cultures of Africa. Brief

prehistoric and historic background of the continent. Comparative study of traditional cultures representative of the continent's diversity. Focus on social, economic, political, religious and aesthetic life, and culture change.

American Indian Studies (AIS)

Contact the American Indian Studies Department for further information, (760) 744-1150, ext. 2425. 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

American Indian Studies

Provides cultural background and preparation to enhance employment opportunities with American Indian people.

Certificate of Achievement

Program Requirements		Units
AIS 130	Prehistoric Cultures of North America	3
AIS 101 or AIS 102	The American Indian Frontier	3
AIS 100	Indian/U.S. Political System	3
AIS 100	Introduction to American Indian Studies	3
AIS 125	American Indians Today	3
Electives (Consult with department prior to selection of two additional courses)		
AIS 105	History of Native American Arts	3
AIS 135	California Indian Arts	3
AIS 110	History of the Plains Indian	3
AIS 115	A History of Southwest Indians	3
AIS 140	The Original Californians	3
AIS 141	Elementary Luiseño IA	3
AIS 142	Elementary Luiseño IB	3
AIS 143	Elementary Luiseño IIA	3
AIS 144	Elementary Luiseño IIB	3
AIS 151	Elementary Cupeño IA	3
AIS 152	Elementary Cupeño IB	3
AIS 153	Elementary Cupeño IIA	3
AIS 154	Elementary Cupeño IIB	3
AIS 120	Indians of the Americas	3
AIS 145	American Indian Literature	3
AIS 150	American Indian Philosophy and Religion	3
AIS 165	Native Women in the Americas	3
AIS 175	American Indian Science and Technology	3
TOTAL UNITS		18

COURSE OFFERINGS

AIS 100 Introduction to American Indian Studies (3)

3 hours lecture

Transfer acceptability: CSU; UC

American Indian cultures in North America are studied from early cultures to contemporary society. A cross-disciplinary approach examines applicable methods and theories from sciences and humanities.

AIS 101 The American Indian Frontier From Colonialism Through the Present (3)

3 hours lecture

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

Transfer acceptability: CSU; UC

The historical, economic, and cultural development of the American Indian in relation to European and American contact. Extensive use and analysis of historical sources from the colonial period through the present.

AIS 102 The American Indian and the U.S. Political System (3)*3 hours lecture***Note:** This course plus AIS 101 meets the State requirement in American History and Institutions.**Transfer acceptability:** CSU; UC – maximum credit for one course: AIS 102, AIS 110, CS 102

Surveys the role of American Indian people in the U.S. political system and institutions. Includes an examination of American Indian political structures and functions from pre-contact period to contemporary as well as analysis of Federal Indian policy and leading issues and organizations that affect the American Indian community.

AIS 105 History of Native American Arts (3)*3 hours lecture***Transfer acceptability:** CSU; UC

An historical survey encompassing North, Meso, and South American Indian arts from pre-Columbian through contemporary periods. American Indian art forms are examined in terms of cultural context, history of styles, and artists.

AIS 110 History of the Plains Indian (3)*3 hours lecture***Transfer acceptability:** CSU; UC

An analysis of the Plains Indian. Examines lifestyles, mores, traditions, and tactics of war. Attention will be given to relations with the U.S. Government and to the background and evolution of acculturations.

AIS 115 A History of Southwest Indians (3)*3 hours lecture***Transfer acceptability:** CSU; UC

A history, transculturation, and present culture of the Southwest Indians with emphasis upon their retention of traditional customs.

AIS 120 Indians of the Americas (3)*3 hours lecture***Transfer acceptability:** CSU; UC

A cross-cultural study of American Indian Peoples in South America, Meso America, and North America. Emphasis is placed on the contrast of societies as diverse as Incans, Amazonians, Eskimos, and Mayans.

AIS 125 American Indians Today (3)*3 hours lecture***Transfer acceptability:** CSU; UC

The development of a greater sensitivity to the American Indian through analysis of ethnocentrism exhibited in contemporary American pluralistic society. This will be done through the analysis of stereotyping, history, cultural practice, and contemporary issues.

AIS 130 Prehistoric Cultures of North America (3)*3 hours lecture***Note:** Cross listed as ANTH 130**Transfer acceptability:** CSU; UC

Emphasis given to prehistoric cultural traditions of the Eastern Woodlands, Central Plains, and Far Western United States and Canada. Special concern for archaeological problems; reconstruction of these traditions and cultural changes.

AIS 135 California Indian Arts (3)*3 hours lecture***Transfer acceptability:** CSU; UC

Emphasis on the regional styles of California tribal arts with analysis of the social, religious, political, and cultural contributions. A combination of lectures, slides, individual projects, small group discussions, field trips, and guest artists.

AIS 140 The Original Californians (3)*3 hours lecture***Note:** Cross listed as ANTH 140.**Transfer acceptability:** CSU; UC

Native people of California: Their origin, language, arts, customs religion, folklore, and music. Special emphasis on Southern California.

AIS 141 Elementary Luiseño IA (3)*3 hours lecture***Note:** AIS 141+142 correspond to one year of high school foreign language**Transfer acceptability:** CSU; UC

An introduction to the fundamentals of the Luiseño language, one of

the four indigenous languages of San Diego County. This course will include a survey of Luiseño language phonology, morphology, syntax and grammar with special emphasis on culturally relevant terminology.

AIS 142 Elementary Luiseño IB (3)*3 hour lecture***Note:** AIS 141+142 correspond to one year of high school foreign language**Transfer acceptability:** CSU; UC

Review of the phonology, morphology, syntax and grammar of the Luiseño language, with continued emphasis on culturally relevant terminology leading to increased proficiency in expressing basic concepts both orally and in writing.

AIS 143 Elementary Luiseño IIA (3)*3 hours lecture***Note:** AIS 143 + 144 correspond to two years of high school foreign language.**Transfer acceptability:** CSU; UC

Elementary grammar, review, composition, and continued oral practice.

AIS 144 Elementary Luiseño IIB (3)*3 hours lecture***Note:** AIS 143 + 144 correspond to two years of high school foreign language.**Transfer acceptability:** CSU; UC

Elementary grammar, review, composition, and continued oral practice.

AIS 145 American Indian Literature (3)*3 hours lecture***Transfer acceptability:** CSU; UC

A survey of historical and contemporary American Indian literature. Examines traditional and contemporary genres.

AIS 150 American Indian Philosophy and Religion (3)*3 hours lecture***Transfer acceptability:** CSU; UC

The principles of American Indian philosophy and religious rites practiced prior to extensive European contacts with North American tribes, and the subsequent impact of European cultures on American Indian philosophy and religion.

AIS 151 Elementary Cupeño IA (3)*3 hours lecture***Note:** AIS 151 + 152 correspond to one year of high school foreign language.**Transfer acceptability:** CSU; UC

Elementary grammar, composition, and oral practice.

AIS 152 Elementary Cupeño IB (3)*3 hours lecture***Note:** AIS 151 + 152 correspond to one year of high school foreign language.**Transfer acceptability:** CSU; UC

Elementary grammar, review, composition, and continued oral practice.

AIS 153 Elementary Cupeño IIA (3)*3 hours lecture***Note:** AIS 153 + 154 correspond to two years of high school foreign language.**Transfer acceptability:** CSU; UC

Elementary grammar, review, composition, and continued oral practice.

AIS 154 Elementary Cupeño IIB (3)*3 hours lecture***Note:** AIS 153 + 154 correspond to two years of high school foreign language.**Transfer acceptability:** CSU; UC

Elementary grammar, review, composition, and continued oral practice.

AIS 155 American Indian Community Development (3)
3 hours lecture
Note: May be taken 4 times
Transfer acceptability: CSU
 Investigation and analysis of the relationship between the American Indian and the non-Indian in contemporary society with special emphasis on fieldwork and research to explore existing programs and to develop solutions to problems originating from these programs.

AIS 160 American Indian Education (3)
3 hours lecture
Transfer acceptability: CSU
 The historical development of American Indian education. Emphasis is placed on traditional philosophies as well as American philosophies as they relate to the educational process of the American Indian.

AIS 165 Native Women in the Americas (3)
3 hours lecture
Transfer acceptability: CSU; UC
 Social and psychological comparison of the roles of native women in the Americas. Areas of emphasis shall include: kinship, childbearing, leadership, and religious roles. These will be examined in contemporary and traditional settings.

AIS 170 Political/History Problems and Issues of California Indians (3)
3 hours lecture
Transfer acceptability: CSU; UC
 Examines the political structure and functions of American Indians in California as they relate to federal, state, and local governments. Includes analysis of problems and issues relevant to California Indians through an historical, political, and economic framework.

AIS 175 American Indian Science and Technology (3)
3 hours lecture
Transfer acceptability: CSU; UC
 An introductory course in the development of scientific ideas in American Indian cultures as compared to other cultures in terms of context, practitioners, and technological applications. Primary comparison is with conventional Western areas of physical, biological, and applied sciences derived from scientific methodology.

AIS 197 American Indian 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 American Indian Studies. See class schedule for specific topic covered. Course title will designate subject covered.

American Sign Language (ASL)

Contact the Speech Communication/Forensics/ASL Department for further information, (760) 744-1150, ext. 2405

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

American Sign Language/English Interpreter Training Program

Preparation courses (for students not already competent in signing): ASL 100, 100L, 101, 101L, 105, 205, 205L, 206, and 206L.

A.A. Degree Major or Certificate of Achievement

Program Requirements	Units
ASL 110 Awareness of Deaf Culture	3
ASL 115 Perspective on Deafness	3
ASL 208 Interpreting as a Profession	3
ASL 210 Interpreting I	4
ASL 211 Interpreting II	4
ASL 215 Interpreting III	4
ASL 216 Interpreting IV	4
ASL 220 Specialized Settings of Interpreting	3
ASL 298 Fieldwork in Interpreting	1.5
ENG 100 English Composition	4
TOTAL UNITS	33.5

Upon successful completion of this program, students may elect to take a proficiency exam to determine eligibility for entry-level employment as ASL/English interpreters.

COURSE OFFERINGS

Courses numbered under 100 are not intended for transfer credit.

ASL 97 Topics in American Sign Language (.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
 The course objectives will depend on the specific topic covered. A set of objectives will be developed for each topic class and included in an outline developed by the instructor.

ASL 100 American Sign Language I (4)
4 hours lecture
Transfer acceptability: CSU; UC
 Introduction to the practice and use of American Sign Language.

ASL 100L American Sign Language I (Lab) (1)
3 hours laboratory
Prerequisite: Completion of, or concurrent enrollment in ASL 100
Note: Credit/No Credit grading only; may be taken 2 times
Transfer acceptability: CSU
 Individualized program intended for students who wish to further improve their ASL skills. Students will utilize videotapes, software, and workbooks in the American Sign Language/English Interpreting Lab to improve comprehension of basic ASL sentences and stories. Through the use of video recording equipment, students will have the opportunity to improve their expressive signing skills. Lab activities are designed to provide students the opportunity to practice vocabulary and syntax taught in ASL 100.

ASL 101 American Sign Language II (4)
4 hours lecture
Prerequisite: ASL 100 with a "C" or better
Transfer acceptability: CSU; UC
 Continued development in American Sign Language.

ASL 101L American Sign Language II (Lab) (1)
3 hours laboratory
Prerequisite: Completion of, or concurrent enrollment in ASL 101
Note: Credit/No Credit grading only; may be taken 2 times
Transfer acceptability: CSU
 Individualized program intended for students who wish to further improve their ASL skills. Students will utilize videotapes, software, and workbooks in the American Sign Language/English Interpreting Lab to improve comprehension of ASL sentences and stories. Through the use of video recording equipment, students will have the opportunity to improve their expressive signing skills. Lab activities are designed to provide students the opportunity to practice vocabulary and syntax taught in ASL 101.

ASL 105 Fingerspelling (3)
3 hours lecture
Prerequisite: ASL 100
Note: May be taken 2 times

Transfer acceptability: CSU

Introduction to the American Manual alphabet (fingerspelling), including numbers, loan signs, acronyms and abbreviations commonly used in the Deaf community. Extensive drills and practice in both expressive and receptive skills.

ASL 110 Awareness of Deaf Culture (3)

3 hours lecture

Transfer acceptability: CSU; UC

An introduction to American Deaf Culture, the history, the community, and the language. Deaf cultural values, characteristics, and dynamics will be discussed as well as issues related to minority dynamics, the double/multiple minority experience, including but not limited to, Deaf African-Americans, Deaf Latinas/Latinos, Deaf Women, Deaf gays/lesbians, Deaf-blind, Deaf senior citizens, and the multiple combinations of these. Organizations and individual perceptions of self in relation to group identity, along with political views as examined through articles, books, and videotaped interviews will be studied.

ASL 115 Perspectives on Deafness (3)

3 hours lecture

Transfer acceptability: CSU

The historical and current implications of deafness. Communication philosophies and systems, educational approaches, and varying philosophies concerning the education and communicating techniques of the Deaf.

ASL 197 Topics in American Sign Language (.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 American Sign Language. See class schedule for specific topic covered. Course title will designate subject covered

ASL 205 American Sign Language III (4)

4 hours lecture

Prerequisite: ASL 101 with a "C" or better

Transfer acceptability: CSU; UC

Intermediate language, phrasing, and communication skills in American Sign Language.

ASL 205L American Sign Language III (Lab) (1)

3 hours laboratory

Prerequisite: Completion of, or concurrent enrollment in ASL 205

Note: Credit/No Credit grading only, may be taken 2 times

Transfer acceptability: CSU

Individualized program intended for students who wish to further improve their ASL skills. Students will utilize videotapes, software, and workbooks in the American Sign Language/English Interpreting Lab to improve comprehension of advanced ASL sentences and stories. Through the use of video recording equipment, students will have the opportunity to improve their expressive and receptive signing skills. Lab activities are designed to provide students the opportunity to practice vocabulary and syntax taught in ASL 205.

ASL 206 American Sign Language IV (4)

4 hours lecture

Prerequisite: ASL 205 with a "C" or better

Transfer acceptability: CSU; UC

Advanced language, phrasing, and communication skills in American Sign Language.

ASL 206L American Sign Language IV (Lab) (1)

3 hours laboratory

Prerequisite: Completion of, or concurrent enrollment in ASL 206

Note: Credit/No Credit grading only; may be taken 2 times

Transfer acceptability: CSU

Individualized program intended for students who wish to further improve their ASL skills. Students will utilize videotapes, software, and workbooks in the American Sign Language/English Interpreting Lab to improve comprehension of advanced ASL sentences and stories. Through the use of video recording equipment, students will have the opportunity to improve their expressive and receptive signing skills. Lab activities are designed to provide students the opportunity to practice vocabulary and syntax taught in ASL 206.

ASL 208 Interpreting as a Profession (3)

3 hours lecture

Prerequisite: ASL 206

Transfer acceptability: CSU

Develops insight into the value of interpreting as a profession. Includes instruction on national testing standards, preparation for certification, and the necessity of ethics as outlined in the Interpreting Code of Ethics.

ASL 210 Interpreting I (4)

4 hours lecture

Prerequisite: ASL 110 and 206 with a "C" or better

Recommended preparation: ENG 100 and ASL 115

Note: May be taken 4 times

Transfer acceptability: CSU

This course provides students with the cognitive skills necessary for interpreting between American Sign Language and English, including discourse analysis of source language messages, paraphrasing and summarizing techniques, and identification of main points. Emphasis is placed on the steps necessary to produce an equivalent target language message through translation, consecutive interpreting, and peer collaboration. Students will begin to develop the skills and knowledge necessary to become culturally sensitive, ethical, and professional interpreters. Primary language of instruction for class lectures and discussion will be ASL. Students are expected to have attained a reasonable level of competency in both ASL and English in order to have access to class lectures and participate fully in class discussions and activities, as instruction will occur in both languages.

ASL 211 Interpreting II (4)

4 hours lecture

Prerequisite: ASL 208 and ASL 210 with a "C" or better

Recommended preparation: ENG 100

Note: May be taken 4 times

Transfer acceptability: CSU

This course is designed to improve student ability to perform the components involved in the process of interpreting as learned in Interpreting I. Primary emphasis is placed on the development of cognitive and linguistic skills, consecutive interpretation, and interpretation of interactive video dialogues between Deaf and hearing people. Students will begin applying skills learned to basic simultaneous interpreting tasks. Further development of language fluency in both American Sign Language (ASL) and English should occur as a result of this course, as instruction will occur in both languages.

ASL 215 Interpreting III (4)

4 hours lecture

Prerequisite: ASL 211 with a "C" or better and ASL 220

Recommended preparation: ENG 10

Note: May be taken 4 times

Transfer acceptability: CSU

This course is a continuation of Interpreting II. Primary emphasis is placed on the development of simultaneous ASL/English interpreting/transliterating tasks. Further development of language fluency in both American Sign Language (ASL) and English should occur as a result of this course. Development of multi-tasking skills enables students to begin interpreting more complex discourse such as that in a higher register or of substantive cognitive-academic content. Students are expected to have attained a reasonable level of competency in both ASL and English in order to have access to class lectures and participate fully in class discussions and activities, as instruction will occur in both languages.

ASL 216 Interpreting IV (4)

4 hours lecture

Prerequisite: ASL 215 with a "C" or better

Corequisite: ASL 298

Recommended preparation: ENG 100

Note: May be taken 4 times

Transfer acceptability: CSU

This course is a continuation of Interpreting III. Emphasis is placed on the enhancement of simultaneous ASL/English interpreting of complex discourse through increased fluency, speed and accuracy. Students will improve equivalence between source and target language while performing simultaneous interpreting and/or transliterating tasks. Students are expected to have attained a reasonable level of competency in both ASL and English in order to have access to class lectures and participate fully in class discussions and activities, as instruction will occur in both languages.

ASL 220 Specialized Settings of Interpreting (3)

3 hours lecture

Prerequisite: Completion of, or concurrent enrollment in ASL 206**Transfer acceptability:** CSU

This course discusses professional, ethical, technical, and logistical factors involved when interpreting between American Sign Language and spoken English in various settings. Specialized settings introduced in this course include: educational, mental health, legal, medical, social services, business, religious, platform, and performing arts. Telephone, Deaf-blind and oral interpreting will also be discussed. The primary language of instruction will be American Sign Language.

ASL 298 Fieldwork in Interpreting (1.5)

4 ½ hours laboratory

Prerequisite: Concurrent enrollment in or completion of ASL 216**Note:** May be taken 2 times**Transfer acceptability:** CSU

The purpose of this course is for students to apply skills and knowledge gained from previous interpreting coursework to actual interpreting assignments. Students will begin interpreting or transliterating, with appropriate supervision and in appropriate situations, for actual assignments. Students will have opportunities to observe qualified working interpreters in a variety of settings. Community service and classroom seminar discussions on professional, ethical, technical and logistical aspects of interpreting will also be included in course content. Students must demonstrate adequate ASL to English and English to ASL performance on an exit exam.

American Studies (AMS)

Contact the American Indian Studies Department for further information, (760) 744-1150, ext. 2425. For transfer information, consult a Palomar College counselor.

COURSE OFFERINGS**AMS 100 American Culture and Identity (3)**

3 hours lecture

Transfer acceptability: CSU; UC

Identity and values, such as the arts, beliefs, and social forms, as expressed in lifestyles. Regional and interdisciplinary approaches will be used to build a dynamic model of American culture and its impact on Americans and the world.

AMS 110 Diverse Cultures in America Today (3)

3 hours lecture

Note: Cross listed as MCS 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.

AMS 182 Introduction to Arts Management (3)

9 hours laboratory

Note: Cross listed as ART 182, DNCE 182, MUS 182 and 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.

AMS 183 Internship in Arts Management (3)

9 hours laboratory

Prerequisite: ART/DANCE/MUS or TA 182**Note:** Cross listed as ART 183, DNCE 183, MUS 183, and TA 183**Transfer acceptability:** CSU

Practical experience in arts management in the visual and performing arts.

AMS 200 Race, Class, and Ethnic Groups in America (3)

3 hours lecture

Note: Cross listed as MCS 200 and SOC 200**Transfer acceptability:** CSU; UC – AMS/MCS/SOC 200 combined: maximum credit, one course

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.

Anthropology (ANTH)

Contact the Behavioral Sciences Department for further information, (760) 744-1150, ext. 2330. 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

Students desiring a career in the field of archaeology or other fields of anthropology have the option of selecting a program leading to the Associate in Arts Degree and/or one or two programs leading to Certificates of Achievement, depending upon their needs and desires.

Archaeological Excavator

Prepares student for employment as an archaeological site excavator.

Certificate of Achievement

Program Requirements		Units
ANTH 100	Introduction to Physical Anthropology	3
ANTH 105	Introduction to Cultural Anthropology	3
ANTH 110	Introduction to Archaeology	3
ANTH 120	Archaeological Excavation	3
ANTH/		
AIS 130	Prehistoric Cultures of North America	3
ANTH/		
AIS 140 or	The Original Californians	3
ANTH 100L and	Physical Anthropology Laboratory	1
ANTH 297	Special Problems in Archaeology	2
ANTH 205	Advanced Archaeological Excavation	3
TOTAL UNITS		21

Archaeological Surveyor and Laboratory Assistant

Prepares student for employment as an archaeological surveyor and laboratory assistant.

Certificate of Achievement

Program Requirements		Units
ANTH 100	Introduction to Physical Anthropology	3
ANTH 105	Introduction to Cultural Anthropology	3
ANTH 110	Introduction to Archaeology	3
ANTH 120	Archaeological Excavation	3
ANTH 205 or	Advanced Archaeological Excavation	3
ANTH 220	Advanced Archaeological Surveying	3
ANTH 210	Archaeological Surveying	3
ANTH 215	Archaeological Laboratory Analysis	3
TOTAL UNITS		21

Archaeology

Provides the student with training which will enhance employment opportunities as a para-professional archaeologist as well as sufficient background to begin upper division work in anthropology.

A.A. Degree Major**Program Requirements**

		Units
ANTH 100	Introduction to Physical Anthropology	3
ANTH 105	Introduction to Cultural Anthropology	3
ANTH 110	Introduction to Archaeology	3
ANTH 120	Archaeological Excavation	3
ANTH/		
AIS 130 or	Prehistoric Cultures of North America	
ANTH/		
AIS 140	The Original Californians	3
ANTH 205	Advanced Archaeological Excavation	3
ANTH 210	Archaeological Surveying	3
ANTH 215	Archaeological Laboratory Analysis	3
ANTH 225	Historical Archaeology	3

Electives (Select 6 units from Groups One and/or Two)**Group One**

AIS 150	American Indian Philosophy and Religion	3
ANTH 125	Evolution, Science & Religion	3
ANTH/		
AS 126	Cultures of Africa	3
ANTH 135	Magic and Folk Religions	3
ANTH 145	Cultures of the Pacific Rim	3
ANTH/		
ENG 150	Introduction to Linguistics	3
ANTH/		
CS 155	Ancient Civilizations of Meso-America	3
ANTH 160	Major Themes/Discoveries/Anth	3
ANTH 296	Special Problems in Anthropology	1,2,3
GEOL 100	Physical Geology	3

Group Two (strongly recommended for focus on technical skills)

ANTH 100L	Physical Anthropology Laboratory	1
ANTH 220	Advanced Archaeological Surveying	3
ANTH 297	Special Problems in Archaeology	1,2,3
CE 150	Cooperative Education Internship	2,3
CSIS 179	Access	1
GEOG 120	Intro Geog Info Sys/Software	3
GEOG 132	Database Mgmt/Data Acquisition	3
GEOG 134	GIS Applications	3
GEOG 136	Intermediate ArcGIS: GIS Analysis	3
GEOG 138	GIS Internship	3
DT/RDT 125	AutoCAD Intro to Computer Aided Drafting	3
PHOTO 230	Digital Darkroom	3
PSYC/SOC 205	Statistics for the Behavioral Sciences	3
TOTAL UNITS		33

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 Archeological Excavation courses for credit.)

ANTH 100 Introduction to Physical Anthropology (3)

3 hours lecture

Transfer acceptability: CSU; UC; CAN ANTH 2

Human bio-cultural origins. The place of humans in nature. Fossil evidence for human and other primate evolution; genetic variability; primate behavior; relationship of physical and cultural adaptations.

ANTH 100L Physical Anthropology Laboratory (1)

3 hours laboratory

Prerequisite: Completion of, or concurrent enrollment in, ANTH 100

Transfer acceptability: CSU; UC

This laboratory course provides an introduction to the methods and techniques used in research in physical/biological anthropology. The topics under study include: the scientific method, principles of evolution, human genetics, human osteology, anthropometrics, forensic anthropology, anatomy and behavior of living nonhuman primates, and paleoanthropology.

ANTH 105 Introduction to Cultural Anthropology (3)

3 hours lecture

Transfer acceptability: CSU; UC; CAN ANTH 4

An introduction to the study of concepts, theories, and methods used in the comparative study of sociocultural systems. The course typically includes subjects such as subsistence patterns, social and

political organization, language and communication, family and kinship, religion, the arts, social inequality, ethnicity, gender, culture change and the application of anthropological perspectives to contemporary issues.

ANTH 110 Introduction to Archaeology (3)

3 hours lecture

Transfer acceptability: CSU; UC; CAN ANTH 6

An introduction covering the history, objectives, and methods of archaeology; significant discoveries throughout the old and new worlds, and the history and nature of culture as revealed by archaeology as an anthropological study. Field studies in local areas may be included.

ANTH 115 Comparative Societies (3)

3 hours lecture

Transfer acceptability: CSU; UC

A survey of the world's diverse peoples and customs as presented in films, lectures, and case study readings.

ANTH 120 Archaeological Excavation (3)

1 hour lecture-6 hours laboratory

Transfer acceptability: CSU

Archaeological field techniques to include a minimum of 90 hours of in-field experience. Course will include excavation, use of instruments/tools, and preparation of a project analysis or report.

ANTH 125 Evolution, Science and Religion (3)

3 hours lecture

Transfer acceptability: CSU; UC

The course focuses on the long-standing debate surrounding biological evolution and various religious views of creation. The evidence and arguments offered for and against evolution and creationist world views are examined in the context of science and the scientific method, the influence of cultural and personal values, the nature and use of evidence, and the difference between knowledge and belief.

ANTH 126 Cultures of Africa (3)

3 hours lecture

Note: Cross listed as AS 126

Transfer acceptability: CSU; UC

Introduction to the indigenous peoples and cultures of Africa. Brief prehistoric and historic background of the continent. Comparative study of traditional cultures representative of the continent's diversity. Focus on social, economic, political, religious and aesthetic life, and culture change.

ANTH 130 Prehistoric Cultures of North America (3)

3 hours lecture

Note: Cross listed as AIS 130

Transfer acceptability: CSU; UC

Emphasis given to prehistoric cultural traditions of the Eastern Woodlands, Central Plains, Far Western United States, and Canada. Special concern for archaeological problems, reconstruction of these traditions and cultural changes.

ANTH 135 Magic and Folk Religions (3)

3 hours lecture

Transfer acceptability: CSU; UC

Anthropological view of the relationships between magic and religion as expressed in rituals, myths, and art is explored through a survey of the less formal or minor religious systems of the world.

ANTH 140 The Original Californians (3)

3 hours lecture

Note: Cross listed as AIS 140

Transfer acceptability: CSU; UC

Native people of California: Their origin, language, arts, customs, religion, folklore, and music. Special emphasis on Southern California.

ANTH 145 Cultures of the Pacific Rim (3)

3 hours lecture

Transfer acceptability: CSU; UC

Peoples and cultures of the Pacific Rim Nations with a focus on cultural similarities and differences in East Asia, Oceania, and the Americas.

ANTH 150 Introduction to Linguistics (3)*3 hours lecture***Note:** Cross listed as ENG 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.

ANTH 155 Ancient Civilizations of Meso-America (3)*3 hours lecture***Note:** Cross listed as CS 155**Transfer acceptability:** CSU; UC

Civilizations of Pre-Columbian Mexico and Central America with a focus on their origins and achievements.

ANTH 160 Major Themes and Discoveries in Anthropology (3)*3 hours lecture***Note:** May be taken 2 times**Transfer acceptability:** CSU; UC - Credit determined by UC upon review of course syllabus.

A general survey of major themes and discoveries in anthropology such as primatology, culture change phenomena, and civilizations of the Old World. Topics will vary from semester to semester.

ANTH 205 Advanced Archaeological Excavation (3)*1 hour lecture-6 hours laboratory***Recommended preparation:** ANTH 120**Note:** May be taken 4 times**Transfer acceptability:** CSU

Training in excavating archaeological features. Specialized field techniques. Archaeological theory as it applies to site interpretation.

ANTH 210 Archaeological Surveying (3)*2 hours lecture-2 hours lecture/laboratory***Recommended preparation:** ANTH 120**Transfer acceptability:** CSU

Archaeological surveying techniques including field reconnaissance, use of topographical maps, site recording, and preparation of a project analysis or report.

ANTH 215 Archaeological Laboratory Analysis (3)*2 hours lecture-2 hours lecture/laboratory***Recommended Preparation:** ANTH 120**Transfer acceptability:** CSU

Training in the laboratory analysis of stone, ceramic, bone, and other artifacts as well as elementary archaeological theory, statistics, and report preparation.

ANTH 220 Advanced Archaeological Surveying (3)*2 hours lecture-2 hours lecture/laboratory***Recommended preparation:** ANTH 210**Transfer acceptability:** CSU

Advanced archaeological survey techniques including sample survey, site relocation, and the use of Global Positioning System (GPS) and laser transit hardware and software for site recordation, data conversion, site mapping, and the completion of a mapping program.

ANTH 225 Historical Archaeology (3)*2 hours lecture-2 hours lecture/laboratory***Recommended preparation:** ANTH 120**Transfer acceptability:** CSU

Method and theory of historical archaeology, including archival research, artifact identification, and report preparation. Training in the location and interpretation of archival documents, such as Franciscan Mission records, Spanish land grant documents, homestead patents, Sanborn fire insurance maps, assessor's records, and historical topographic maps. Training in the identification of ceramic, glass and metal artifacts and their associated function, method of manufacture, manufacturer, and temporal distribution.

ANTH 296 Special Problems in Anthropology (1,2,3)*3, 6, or 9 hours laboratory***Note:** ANTH 296 and 297 may be taken 4 times as Archaeology AA degree electives for a combined maximum of 6 units.**Transfer acceptability:** CSU; UC - Credit determined by UC upon review of course syllabus.

An individualized or group project in cultural or physical anthropology of any nature approved by the instructor and under the personal supervision of the instructor.

ANTH 297 Special Problems in Archaeology (1,2,3)*3, 6 or 9 hours laboratory***Note:** ANTH 296 and 297 may be taken 4 times as Archaeology AA degree electives for a combined maximum of 6 units.**Transfer acceptability:** CSU; UC - Credit determined by UC upon review of course syllabus.

An individualized or group project in archaeology approved by the instructor and under the personal supervision of the instructor.

Apprenticeship Training (AP)

Carpentry, Drywall/Lather, Electrician, Sheet Metal, Sound and Communication Systems

Contact Occupational & Noncredit programs for further information, (760) 744-1150, ext. 2600

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

A program for the training of apprentices, consisting of full-time, on-the-job employment plus related classroom instruction.

A CERTIFICATE OF ACHIEVEMENT and/or JOURNEYPERSON TRADE CERTIFICATE will be awarded students for each program successfully completed. Students who wish to obtain an Associate in Arts Degree may do so by fulfilling the general graduation requirements in addition to the completion of the apprenticeship courses.

A program is maintained for the training of apprentices in the trades as listed. Students who wish to become apprentices should appear before the appropriate Joint Apprenticeship Committee. Training consists of full-time work on-the-job supplemented by related classroom instruction. All students entered in the apprenticeship work experience program are expected to enter AP WE 110. A maximum of 16 units, credit/no credit only, may be earned in Cooperative Work Experience Education, not to exceed 4 units each semester.

Students whose work or attendance is not satisfactory may be dropped from the program by the College, or other corrective measures may be taken by the Joint Apprenticeship Committee. The College grants academic credit for the successful completion of the training program.

Upon completion of the training program, journeyperson trade certificates and college achievement certificates are awarded at a special completion ceremony.

The final digit in the course number indicates that period of apprenticeship.

SAFETY GLASSES - Education Code 32030-32034 requires that safety glasses be worn in those classes where eye damage might occur. Students in such classes will be so informed by their instructors. Glasses are available at the college bookstore.

Carpentry (AP C)

A four-year apprenticeship program. Applicants for this program should be directed to the Carpenters Joint Apprenticeship and Training Committee for Southern California, San Diego Carpenters Training Center, 8595 Miralani Drive, San Diego, CA 92126. Telephone (858) 621-2667.

A.A. Degree Major or Certificate of Achievement

Program Requirements

AP C 108 Welding
AP C 201 Orientation I

Units

3
1.5

AP C 202 Orientation II 1.5
AP WE 110 Work Experience 16

Electives (Select 14 courses)

AP C 203	Blueprint I	1.5
AP C 204	Blueprint II	1.5
AP C 205	Foundations	1.5
AP C 206	Flatworks	1.5
AP C 207	Tilt-Up	1.5
AP C 208	Wall Forms	1.5
AP C 209	Gang Forms	1.5
AP C 210	Patented Forming Systems	1.5
AP C 211	Architectural Concrete	1.5
AP C 212	Column Forms	1.5
AP C 213	Beam & Deck Forming	1.5
AP C 214	Wall Framing I	1.5
AP C 215	Wall Framing II	1.5
AP C 216	Floor Framing	1.5
AP C 217	Stair Building I	1.5
AP C 218	Stair Building II	1.5
AP C 219	Exterior Details I	1.5
AP C 220	Exterior Details II	1.5
AP C 221	Roof Framing I	1.5
AP C 222	Roof Framing II	1.5
AP C 223	Metal Framing	1.5
AP C 224	Commercial Framing	1.5
AP C 225	Formwork Problems	1.5
AP C 226	Bridge Construction	1.5
AP C 227	Stairs & Ramps	1.5
AP C 228	Stair Trim	1.5
AP C 229	Basic Cabinetry	1.5
AP C 230	Cabinetry Installation	1.5
AP C 231	Scaffolding – Orientation I	1.5
AP C 232	Scaffolding – Orientation II	1.5
AP C 233	Scaffolding Introductions	1.5
AP C 234	Interior Scaffolding	1.5
AP C 235	Residential/Commercial Molding	1.5
AP C 236	Plastic Laminates	1.5
AP C 237	Introduction to Door Hardware	1.5
AP C 238	Wood/Metal Jamb and Pre-hung Doors	1.5
AP C 239	Hinge and Door-Closure Hardware	1.5
AP C 240	Cylindrical and Mortise Locksets	1.5
TOTAL UNITS		43

COURSE OFFERINGS

AP C 108 Welding (3)

2 hours lecture-3 hours laboratory

Note: May be taken 2 times

Introduction to trade welding. Emphasis is given to the importance of safe work practices on the construction site and the goal of welder certification. The AWS welding codes for structural, light gauge, and re-bar certifications are reviewed.

AP C 197 Carpentry 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: Indentured apprentice to the Carpenters Joint Apprenticeship and Training Committee for Southern California

Note: May be taken 4 times

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

AP C 201 Orientation I (1.5)

1 hour lecture-1 ½ hours laboratory

Prerequisite: Indentured apprentice to the Carpenters Joint Apprenticeship and Training Committee for Southern California

Note: May be taken 2 times

This course will introduce the use of various hand and power tools used in the trade. Students will be introduced to the history of trade apprenticeships. Construction math and job site safety practices will also be covered.

AP C 202 Orientation II (1.5)

1 hour lecture-1 ½ hours laboratory

Prerequisite: AP C 201

Note: May be taken 2 times

This course will provide the apprentice with various safety

competencies. A student will demonstrate the ability to construct a welded frame scaffold to OSHA standards as well as the operation of a lift truck. In addition they will be introduced to blueprints and their use.

AP C 203 Blueprint I (1.5)

1 hour lecture-1 ½ hours laboratory

Note: May be taken 2 times

This course is the first of two classes in blueprint reading. The course will cover the fundamental functions and structure of blueprints. Construction drawings, line symbols, freehand sketching as well as pictorial drawings will be covered.

AP C 204 Blueprint II (1.5)

1 hour lecture-1 ½ hours laboratory

Prerequisite: AP C 203

Note: May be taken 2 times

This course is the second of two classes in blueprint reading. This course will cover foundation prints, commercial prints, residential prints and estimating. Construction specifications will also be covered.

AP C 205 Foundations (1.5)

1 hour lecture- 1 ½ hours laboratory

Note: May be taken 2 times

This course will focus on the use of concrete in the construction industry. Basic layout techniques will be studied and applied for foundations. Related safety, math and blueprint reading will be covered.

AP C 206 Flatworks (1.5)

1 hour lecture-1 ½ hours laboratory

Note: May be taken 2 times

This course is designed to show the various applications of forming to include slab-on-grade, driveways and walks, and curb and gutter forms. Related safety, math and blueprint reading will be covered.

AP C 207 Tilt-Up (1.5)

1 hour lecture-1 ½ hours laboratory

Note: May be taken 2 times

This course is designed to give an overview of the Tilt-up industry. Form techniques and panel hardware will be discussed. Related safety, math and blueprint reading will be covered.

AP C 208 Wall Forms (1.5)

1 hour lecture-1 ½ hours laboratory

Note: May be taken 2 times

This course will introduce the basic techniques of poured-in-place concrete wood form construction. Related safety, math and blueprint reading will be covered.

AP C 209 Gang Forms (1.5)

1 hour lecture-1 ½ hours laboratory

Note: May be taken 2 times

This course will present the various applications of pre-fabricated wall forming systems. Related safety, blueprint reading will be covered.

AP C 210 Patented Forming Systems (1.5)

1 hour lecture-1 ½ hours laboratory

Note: May be taken 2 times

Proprietary wall forming systems such as Atlas, EFCO, and Symons are an integral part of the concrete industry. Students will be instructed in the application and rigging of these systems.

AP C 211 Architectural Concrete (1.5)

1 hour lecture-1 ½ hours laboratory

Notes: May be taken 2 times

In this course the forming of poured-in-place columns will be covered, with instruction and practice in both job-built.

AP C 212 Column Forms (1.5)

1 hour lecture-1 ½ hours laboratory

Note: May be taken 2 times

In this course the forming of poured-in-space columns will be covered, with instruction and practice in both job-built and the proprietary systems, and the shoring and forming of drop heads. Estimating, safety, and rigging of materials will be included. Math and blueprint reading will be covered.

AP C 213 Beam and Deck Forming (1.5)

1 hour lecture-1 ½ hours laboratory

Note: May be taken 2 times

This course will introduce the use of various wood and patented forming systems used in the construction of concrete beams and decks. Metal beam forms and capitals will be taught in this class. Layout and builders level skills will be used in this class.

AP C 214 Wall Framing I (1.5)

1 hour lecture-1 ½ hours laboratory

Note: May be taken 2 times

This course provides an introduction to the theory and practice of wall framing. Students start by learning to read floor plans, and then laying out wall locations, plate and detail, as well as openings and structural connections. Construction math and job site safety practices will also be covered.

AP C 215 Wall Framing II (1.5)

1 hour lecture-1 ½ hours laboratory

Prerequisite: AP C 214

Note: May be taken 2 times

This class covers layout, assembly, and erection of both standard and raked walls. Application of bracing, plumbing and aligning walls will also be covered. Construction math, blueprint reading and job site safety practices will also be covered.

AP C 216 Floor Framing (1.5)

1 hour lecture-1 ½ hours laboratory

Note: May be taken 2 times

This course will cover the layout and construction of both residential and commercial floor framing. The use of building codes and blueprint reading will be covered. Fall protection along with job site and math will also be covered.

AP C 217 Stair Building I (1.5)

1 hour lecture-1 ½ hours laboratory

Note: May be taken 2 times

Stair construction is an integral part of carpenter's trade. This course presents stair theory, related mathematics, code requirements and basic layout stringers, treads and risers. Students will layout, cut and erect a straight-run stair. Blueprint reading and safety will also be covered.

AP C 218 Stair Building II (1.5)

1 hour lecture-1 ½ hours laboratory

Prerequisite: AP C 217

Note: May be taken 2 times

This course builds upon the concepts presented in Stair Building I. This class will teach students about winders, u-shaped and radius stair building, as well as code requirements and mathematical calculations. Blueprint reading and safety will also be covered.

AP C 219 Exterior Details I (1.5)

1 hour lecture-1 ½ hours laboratory

Note: May be taken 2 times

This course teaches students to read blueprints related to building exteriors such as elevations, sections, and schedules. Construction of structural and architectural elements such as balconies, fireplaces, bay windows, columns and pop-outs. Blueprint reading, mathematical calculations and safety will also be covered..

AP C 220 Exterior Details II (1.5)

1 hour lecture-1 ½ hours laboratory

Prerequisite: AP C 219

Note: May be taken 2 times

A continuation of Exterior Details I, this course will review the reading of relevant drawings, and include hands-on training in window installation, door and window trim, as well as various sidings and trims. Mathematical calculations and safety will also be covered.

AP C 221 Roof Framing I (1.5)

1 hour lecture-1 ½ hours laboratory

Note: May be taken 2 times

Roof construction is one of the most challenging and satisfying facets of carpentry. This basic course will introduce rafter theory and layout. Students will construct a gable roof using conventional and truss methods. Mathematical calculations for various rafter lengths and safety will also be covered.

- AP C 222 Roof Framing II** (1.5)
1 hour lecture-1 ½ hours laboratory
Prerequisite: AP C 221
Note: May be taken 2 times
 This course is a continuation of Roof Framing I, and will review rafter theory, and introduces hip and intersecting roofs, blind valley and dormer construction. Mathematical calculations for various rafter lengths and safety will also be covered.
- AP C 223 Metal Framing** (1.5)
1 hour lecture-1 ½ hours laboratory
Note: May be taken 2 times
 This course introduces the student to the technology of metal framing. Tools and materials will be covered along with floor and wall construction, including openings and structural connections, and metal truss roof systems. Mathematical calculations for various rafter lengths and safety will also be covered.
- AP C 224 Commercial Framing** (1.5)
1 hour lecture-1 ½ hours laboratory
Note: May be taken 2 times
 The thrust of this course will be commercial blueprint reading, along with an introduction to balloon wall framing and panelized roof systems. Construction math, blueprint reading and job site safety practices will also be covered.
- AP C 225 Formwork Problems** (1.5)
1 hour lecture-1 ½ hours laboratory
Note: May be taken 2 times
 This course will address form design, material estimating and problems relative to form construction. Related safety, math and blueprint reading will be covered.
- AP C 226 Bridge Construction** (1.5)
1 hour lecture-1 ½ hours laboratory
Note: May be taken 2 times
 This course is to give an overview of basic bridge construction. Related safety, math and blueprint reading will be covered.
- AP C 227 Stairs & Ramps** (1.5)
1 hour lecture-1 ½ hours laboratory
Note: May be taken 2 times
 This course is designed to teach the various techniques used to form stairs and ramp structures. Related safety, math and blueprint reading will be covered.
- AP C 228 Stair Trim** (1.5)
1 hour lecture-1 ½ hours laboratory
Note: May be taken 2 times
 Covers a variety of moldings, installation for interior stairs, blueprint, and finish schedules, math and related safety regulations.
- AP C 229 Basic Cabinetry** (1.5)
1 hour lecture-1 ½ hours laboratory
Note: May be taken 2 times
 Introduction to basic cabinet construction. Blueprint and finish schedules will be covered as well as related safety and math.
- AP C 230 Cabinetry Installation** (1.5)
1 hour lecture-1 ½ hours laboratory
Note: May be taken 2 times
 Students will learn how to install base and wall-hung cabinets, learn scribing techniques, and how to read blueprint and finish schedules. Related safety and math will also be covered.
- AP C 231 Scaffolding – Orientation I** (1.5)
1 hour lecture-1 ½ hours laboratory
Note: May be taken 2 times
 This course provides instruction in various safety competencies. The Federal Occupational Safety and Health Act (OSHA) as well as California Occupational Safety and Health Act (Cal OSHA) will be covered. Hand tools, power tools, math, and beginning blueprint reading will also be covered.
- AP C 232 Scaffolding – Orientation II** (1.5)
1 hour lecture-1 ½ hours laboratory
Note: May be taken 2 times
 This course will provide the apprentice instruction in various safety competencies. Students will learn to safely operate a life truck and aerial lift equipment in addition to receiving American Red Cross First Aid/CPR training.
- AP C 233 Scaffolding Introductions** (1.5)
1 hour lecture-1 ½ hours laboratory
Note: May be taken 2 times
 Introduction to basic layout and assembly of welded frame scaffolding. Calculating leg loads, structure plan views, material estimating and safety, math and blueprint reading will also be covered.
- AP C 234 Interior Scaffolding** (1.5)
1 hour lecture-1 ½ hours laboratory
Note: May be taken 2 times
 Introduction to the basic layout and assembly of welded frame, tube-and-clamp and rolling tower scaffolding for large interior projects. Calculating leg loads, structural plan views, material estimating and related safety, math and blueprint reading will also be covered.
- AP C 235 Residential/Commercial Molding** (1.5)
1 hour lecture-1 ½ hours laboratory
Note: May be taken 2 times
 Introduction to various moldings and the specific installation techniques of each. Blueprint, finish schedules, related safety and math will also be covered.
- AP C 236 Plastic Laminates** (1.5)
1 hour lecture-1 ½ hours laboratory
Note: May be taken 2 times
 Introduction to the manufacture and installation of plastic laminates on horizontal and vertical surfaces to include instruction in cutting and scribing. Blueprint, finish schedules, and related safety and math will also be covered.
- AP C 237 Introduction to Door Hardware** (1.5)
1 hour lecture-1 ½ hours laboratory
Note: May be taken 2 times
 Introduction to doors and door hardware schedules, specifications and manufacturer's catalogs. Fire codes that govern the hardware industry as well as how to identify various door hardware including locksets, closures, hinges, panic hardware and door sweeps etc. Blueprint, finish schedules, and related safety and math will also be covered.
- AP C 238 Wood/Metal Jambs and Pre-hung Doors** (1.5)
1 hour lecture-1 ½ hours laboratory
Note: May be taken 2 times
 Introduction to the various types of metal and wood door jambs and instruction on proper assembly. Shop demonstrations will include proper installation and techniques to scribe a new door to an existing jamb. Blueprint, finish schedules, and related safety and math will also be covered.
- AP C 239 Hinge and Door-Closure Hardware** (1.5)
1 hour lecture-1 ½ hours laboratory
Note: May be taken 2 times
 Introduction to the selection and installation of proper hinge and door-closure hardware, Blueprints, finish schedules, and related safety and math will also be covered.
- AP C 240 Cylindrical and Mortise Locksets** (1.5)
1 hour lecture-1 ½ hours laboratory
Note: May be taken 2 times
 Introduction to proper selection and installation of cylindrical and mortise locksets and exit devises. Students will gain hands-on experience in the proper selection of power tools for installing various types of locksets in commercial and residential properties. Blueprint, finish schedules, and related safety and math will also be covered.
- Drywall/Lather (AP DL)**
 A three-year apprenticeship program. Applicants for this program should be directed to the Carpenters Joint Apprenticeship and Training Committee for Southern California, San Diego Carpenters Training Center, 8595 Miralani Drive, San Diego, CA 92126. Telephone (858) 621-2667.

A.A. Degree Major or Certificate of Achievement

Program Requirements		Units
AP DL 201	Drywall/Lather Orientation I	1.5
AP DL 202	Drywall/Lather Orientation II	1.5
AP DL 203	Blueprint Reading I	1.5
AP DL 204	Blueprint Reading II	1.5
AP DL 205	Basic Lathing – Structural Framing	1.5
AP DL 206	Ceilings & Soffits	1.5
AP DL 207	Basic Framing – Material Identification	1.5
AP DL 208	Advanced Framing/Suspended Ceilings/CRC	1.5
AP DL 209	Advanced Framing – Curves & Arches	1.5
AP DL 210	AWS Certification – Welding – Light Gage	1.5
AP DL 211	LA City Certification – Welding – Light Gage	1.5
AP DL 212	Drywall Finishing	1.5
AP DL 213	Acoustical Ceilings	1.5
AP WE 110	Work Experience	16
TOTAL UNITS		35.5

COURSE OFFERINGS**AP DL 197 Drywall/Lather Topics (1.5-4)**

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: Indentured apprentice to the Carpenters Joint Apprenticeship and Training Committee for Southern California

Note: May be taken 4 times.

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

AP DL 201 Drywall/Lather Orientation I (1.5)

1 hour lecture-1 ½ hours laboratory

Prerequisite: Indentured apprentice to the Carpenters Joint Apprenticeship and Training Committee for Southern California

Note: May be taken 2 times

This course will provide the apprentice with various safety competencies. Hand tools, power tools, math, and beginning blueprint reading will also be covered. A student will demonstrate the ability to construct a welded frame scaffold to OSHA standards.

AP DL 202 Drywall/Lather Orientation II (1.5)

1 hour lecture-1 ½ hours laboratory

Prerequisite: AP DL 201

Note: May be taken 2 times

This course will provide the apprentice with various safety competencies. A student will demonstrate the ability to safely operate a lift truck and aerial lift equipment. In addition they will receive American Red Cross First Aid/CPR as well as training in asbestos awareness and low velocity powder actuated tools.

AP DL 203 Blueprint Reading I (1.5)

1 hour lecture-1 ½ hours laboratory

Note: May be taken 2 times

This course is designed to teach the basics of reading, understanding and visualizing the blueprints. Terms, symbols and definitions from several trades will be incorporated. Prints showing both residential and commercial application will be used. Related safety, math and blueprint reading will be covered.

AP DL 204 Blueprint Reading II (1.5)

1 hour lecture-1 ½ hours laboratory

Prerequisite: AP DL 203

Note: May be taken 2 times

This course will give the student more in depth training related to on the job conditions. Basic estimating, material take offs and organizing jobs will be included. Related safety, math and blueprint reading will be covered.

AP DL 205 Basic Lathing – Structural Framing (1.5)

1 hour lecture-1 ½ hours laboratory

Note: May be taken 2 times

This course will cover the different styles and techniques of structural framing compared to light gage framing. Proper waterproofing, lath or drywall and trim will be explained, demonstrated and applied to the framing. Related safety, math and blueprint reading will be covered.

AP DL 206 Ceilings & Soffits (1.5)

1 hour lecture-1 ½ hours laboratory

Note: May be taken 2 times

This course is designed to provide instruction in the basics of framing ceilings and soffits with drywall and lath application. Related safety, math and blueprint reading will be covered.

AP DL 207 Basic Framing – Material Identification (1.5)

1 hour lecture-1 ½ hours laboratory

Note: May be taken 2 times

An in-depth study of basic material identification, print layout, framing, drywall applications and proper trim applications for the Drywall/Lath industry. Safety, math and blueprint reading will be covered.

AP DL 208 Advanced Framing/Suspended Ceilings/CRC (1.5)

1 hour lecture-1 ½ hours laboratory

Note: May be taken 2 times

This course is designed to provide related classroom instruction with the technical skills and knowledge to successfully frame any suspended ceiling in drywall and lath. Related hand and power tool safety, math and blueprint reading will be covered.

AP DL 209 Advanced Framing – Curves & Arches (1.5)

1 hour lecture-1 ½ hours laboratory

Note: May be taken 2 times

This course is designed to teach curves and arches, barrel ceilings, radius walls and soffits. Related hand and power tool safety, math and blueprint reading will be covered.

AP DL 210 AWS Certification – Welding – Light Gage (.5)

1 hour lecture-1 ½ hours laboratory

Note: May be taken 2 times

This course is designed to teach the practical skills needed for the arc welding processes and applications. Students will have the practical skills to successfully pass the AWS light gage certification. Related safety, codes and materials will be covered.

AP DL 211 LA City Certification – Welding – Light Gage (1.5)

1 hour lecture-1 ½ hours laboratory

Note: May be taken 2 times

Assists students in preparing for the Los Angeles City Light Gage Welding Certification. Written and practical skills of the test will be demonstrated and discussed in order to associate the student with the working knowledge necessary to successfully achieve a Los Angeles City Light Gage Welding Certification. Related safety, codes and materials will be covered.

AP DL 212 Drywall Finishing (1.5)

1 hour lecture-1 ½ hours laboratory

Note: May be taken 2 times

This course is designed to give the apprentice a full perspective of the finish trade. Blueprint and finish schedules will be covered. The basic gypsum board applications and finish trims will be explored. The various tools used from basic hand tools such as the "bazooka", boxes and nail spotters will also be covered. Related safety and math will be included.

AP DL 213 Acoustical Ceilings (1.5)

1 hour lecture-1 ½ hours laboratory

Note: May be taken 2 times

This course is designed to provide the apprentice with the knowledge and application of Acoustical ceilings, seismic codes and the supporting theory. Wall molds and trims, and ceiling layouts will be covered. Blueprints reading will cover terms, symbols and definitions for both commercial and residential projects. Related safety, math, safety codes and materials will be covered.

Electrician (AP E)

A five-year apprenticeship program. Applicants for San Diego/Imperial counties should apply to the San Diego Electrical Training Trust, 4675 Viewridge Avenue, Suite D, San Diego, CA 92123. Telephone: (858) 569-6322.

Applications for Riverside/San Bernardino/Mono/Inyo counties should apply to the Riverside and San Bernardino Joint Electrical Apprenticeship Training Committees, 1655 East Riverview Drive, San Bernardino, CA 92408. Telephone: (909) 796-9340.

A.A. Degree Major or Certificate of Achievement

Program Requirements	Units
AP E 101 Electrical Trade/Industry/DC/Conduit	4
AP E 102 Electrical Theory/Practice/Blueprint Reading	4
AP E 103 Inductance/Capacitance Theory	4
AP E 104 Transformers/Code Calculations/Conduit	4
AP E 105 Electronic/Industrial Blueprints	4
AP E 106 Grounding/Elec Svcs/Connection	4
AP E 107 Motor Control/Pilot Dev/ Starters	4
AP E 108 Digital Electronics	4
AP E 109 Mgmt/Alarms/Testing/Wiring	4
AP E 110 Programmable Logic Controllers	4
AP WE 110 Work Experience	16
TOTAL UNITS	56

COURSE OFFERINGS

AP E 101 Introduction to the Electrical Trade and Industry, DC Theory and Conduit Bending (4)

3 hours lecture-3 hours laboratory

Prerequisite: Completion of the following: (1) One semester of Algebra 1 with a grade of "C" or better; (2) Designated tests with a passing grade determined by the appropriate committee; (3) Indentured apprentice to the San Diego Electrical Joint Apprenticeship and Training Committee or the Riverside and San Bernardino Joint Electrical Apprenticeship Training Committee

Note: May be taken 2 times

Orientation to the electrical industry; introduction to the electrical code; fundamentals of wiring methods, fastening devices, electrical conductors, circuits, and voltage.

AP E 102 Electrical Theory, Practice and Blueprint Reading (4)

3 hours lecture-3 hours laboratory

Prerequisite: AP E 101

Note: May be taken 2 times

Study of floor and plot plan; basic blueprint reading and circuit drawing; theory of magnetism; DC and AC generators; motors and transformers; on-the-job safety and first aid, and the electrical code.

AP E 103 Inductance and Capacitance Theory and Codeology (4)

3 hours lecture-3 hours laboratory

Prerequisite: AP E 102

Note: May be taken 2 times

Review of the International Brotherhood of Electrical Workers constitution and local union by-laws. Study of the effects of inductance and capacitance on current and voltage. Application of phase angle calculation and the National Electric Code. Overview of workplace problems due to drug abuse.

AP E 104 Transformers and Code Calculations, Conduit Bending and Blueprints (4)

3 hours lecture-3 hours laboratory

Prerequisite: AP E 103

Note: May be taken 2 times

Study of transformers theory, installation, connection and distribution systems. Performing short circuit calculations, selecting of building wire for specific applications, calculating loads for residential and multifamily loads and service feeders. Applying conduit bending principles using mechanical benders to fabricate segmented concentric bends.

AP E 105 Introduction to Electronics and Industrial Blueprints (4)

3 hours lecture-3 hours laboratory

Prerequisite: AP E 104

Note: May be taken 2 times

Introduction to basic electronics including examination of semiconductor devices, current and voltage manipulation, applications, and blueprint reading.

AP E 106 Grounding, Electrical Services, and Transform Three-Phase Connections (4)

3 hours lecture-3 hours laboratory

Prerequisite: AP E 105

Note: May be taken 2 times

Study of requirements for electrical services installation. Study of electrical grounding including merits, impact on safety, ground fault protection, and identification of grounding system elements and functions.

AP E 107 Electrical Motor Control, Pilot Devices, Starters and Relays (4)

3 hours lecture-3 hours laboratory

Prerequisite: AP E 106

Note: May be taken 2 times

Study of controls and circuits, pilot devices, starters, and relays. Includes the analysis and development of circuits, the installation and service of electrical equipment, and the electrical code.

AP E 108 Digital Electronics (4)

3 hours lecture-3 hours laboratory

Prerequisite: AP E 107

Note: May be taken 2 times

Introduction to digital electronic technology and electronic equipment. Instruction includes basic digital systems, binary and decimal numbering systems, decision-making logic circuits, Boolean Algebra, flip-flops, counters, shift registers, encoders, decoders, ROMs, DC to AC converters and organization of these component blocks to accomplish manipulation of data.

AP E 109 Management, Fire Alarms, High Voltage Testing, and Telephone and Security Wiring (4)

3 hours lecture-3 hours laboratory

Prerequisite: AP E 108

Note: May be taken 2 times

Introduction to management and marketing practices, installation of fire alarm systems and the National Electric Code as it relates to alarm installation and high voltage of telephone wiring and security systems.

AP E 110 Programmable Logic Controllers (4)

3 hours lecture-3 hours laboratory

Prerequisite: AP E 109

Note: May be taken 2 times

Introduction to basic input/output hardware, processors and memory numbering systems associated with programmable controllers. Instruction includes use of personal computer to create and modify ladder diagrams and relay instructions, using solid state logic elements, counters, and shift registers. Principles of process control are explained and principle components are identified.

AP E 197 Electrical 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: Indentured apprentice to the San Diego Electrical Joint Apprenticeship and Training Committee or the Riverside and San Bernardino Joint Electrical Apprenticeship Training Committee

Note: May be taken 4 times

Concentrated courses on electricity. Course title will designate subject covered.

Sheet Metal (AP SM)

A five-year apprenticeship program. Applicants for this program should be directed to the San Diego Sheet Metal Joint Apprenticeship and Training Committee, 4596 Mission Gorge Place, San Diego, CA 92120. Telephone (858) 265-2758.

A.A. Degree Major or Certificate of Achievement

Program Requirements	Units
AP SM 101 Basic Sheet Metal Processes I	4
AP SM 102 Basic Sheet Metal Processes II	4
AP SM 103 Intermediate Processes I	4
AP SM 104 Intermediate Processes II	4

AP SM 105	Sheet Metal Welding	3
AP SM 106	Plans & Specifications	4
AP SM 107	Construction Plan Problem Solving	4
AP SM 108	Introduction to Basic Refrigeration	4
AP SM 109	Foreman Training	4
AP SM 110	Project Management	4
AP WE 110	Work Experience	16
TOTAL UNITS		55

COURSE OFFERINGS

AP SM 101 Basic Sheet Metal Processes I (4)

3 hours lecture-3 hours laboratory

Prerequisite: Indentured apprentice to the San Diego Sheet Metal Joint Apprenticeship and Training Committee

Note: May be taken 2 times

This course provides an introduction to the basic principles, processes, drawings and materials used in the sheet metal industry.

AP SM 102 Basic Sheet Metal Processes II (4)

3 hours lecture-3 hours laboratory

Prerequisite: AP SM 101

Note: May be taken 2 times

A continuation of basic sheet metal processes as well as an introduction to simple sheet metal forming processes.

AP SM 103 Intermediate Processes I (4)

3 hours lecture-3 hours laboratory

Prerequisite: AP SM 102

Note: May be taken 2 times

An introduction to intermediate sheet metal processes demonstrating job layout, architectural details and construction techniques with problems of unusual complexity and difficulty.

AP SM 104 Intermediate Processes II (4)

3 hours lecture-3 hours laboratory

Prerequisite: AP SM 103

Note: May be taken 2 times

A continuation of intermediate sheet metal introducing problems of greater complexity and difficulty.

AP SM 105 Sheet Metal Welding (3)

1 ½ hours lecture-4 ½ hours laboratory

Prerequisite: AP SM 104

Note: May be taken 2 times

An introduction to the basic principles and methods of gas and arc welding used in the sheet metal industry. Includes codes, standards, welding theory and the practical application using prescribed welding procedures and equipment.

AP SM 106 Plans and specifications (4)

3 hours lecture-3 hours laboratory

Prerequisite: AP SM 105

Note: May be taken 2 times

An introduction to the language and organization of plans and specifications for sheet metal projects. Topics will include architectural, structural, mechanical and electrical drawings as well as how to write and implement a change order to plans and specifications.

AP SM 107 Construction Plan Problem Solving (4)

3 hours lecture-3 hours laboratory

Prerequisite: AP SM 106

Note: May be taken 2 times

Learn to apply detailing and research skills to create changes to plans and specifications using intermediate process problems of unusual complexity and difficulty.

AP SM 108 Introduction to Basic Refrigeration (4)

3 hours lecture-3 hours laboratory

Prerequisite: AP SM 107

Note: May be taken 2 times

An introduction to the physical components and systems of a basic HVAC system as well as hands-on techniques for startup and basic system troubleshooting.

AP SM 109 Foreman Training (4)

3 hours lecture-3 hours laboratory

Prerequisite: AP SM 108

Note: May be taken 2 times

Develop skills for planning and supervision of projects and employees in the sheet metal industry. Topics will include budgets, human relations, communication, leadership, training and evaluation.

AP SM 110 Project Management (4)

3 hours lecture-3 hours laboratory

Prerequisite: AP SM 109

Note: May be taken 2 times

Develop comprehensive sheet metal project management skills using problems of unusual complexity and difficulty.

AP SM 197 Sheet Metal 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: Indentured apprentice to the San Diego Sheet Metal Joint Apprenticeship and Training Committee

Note: May be taken 4 times

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

Sound and Communication Systems Installer (AP SC)

A three-year apprenticeship program. Applicants for this program should be directed to the Riverside and San Bernardino Joint Electrical Apprenticeship Training Committees, 1655 East Riverview Drive, San Bernardino, CA 92408. Telephone: (909) 796-9340.

A.A. Degree Major or Certificate of Achievement

Program Requirements	Units
AP SC 101 Intro to Sound/Communication Trade Industry	4
AP SC 102 Electrical Theory and Practices DC	4
AP SC 103 Electrical Theory and Practices AC	4
AP SC 104 Semiconductor Electronics	4
AP SC 105 Intro to Digital Electronics	4
AP SC 106 Management/Alarms/Codes/Circuits	4
AP WE 110 Work Experience	16
TOTAL UNITS	40

Sound Technician (AP SC)

A four-year apprenticeship program. Students will work in the field during the day and attend class in the evenings. Each apprentice is paid for field work with regularly scheduled pay increases based on required work hours and completion of classroom instruction. Upon completion of this program, students will receive a certificate of completion from the California Division of Apprenticeship Standards and Journeyman Sound Technician status in the I.B.E.W. All students must be indentured Sound Technical apprentices to be eligible for the course. Interested applicants from San Diego/Imperial counties should apply to the San Diego Electrical Training Trust, 4675 Viewridge Avenue, Suite D, San Diego, CA 92123. Telephone: (858) 569-6322.

A.A. Degree Major or Certificate of Achievement

Program Requirements	Units
AP SC 101 Intro to the Sound/Communication Trade Industry	4
AP SC 102 Electrical Theory and Practices DC	4
AP SC 103 Electrical Theory and Practices AC	4
AP SC 104 Semiconductor Electronics	4
AP SC 105 Introduction to Digital Electronics	4
AP SC 106 Management/Alarms Codes/Circuits	4
AP SC 107 Life Safety and Security System Applications	4
AP SC 108 Specialized Systems and Supervision Techniques	4
AP WE 110 Work Experience	16
TOTAL UNITS	48

COURSE OFFERINGS

AP SC 101 Introduction to the Sound and Communication Trade Industry (4)

3 hours lecture-3 hours laboratory

Prerequisite: A minimum grade of "C" in MATH 50. Completion of designated tests with a passing grade determined by the appropriate committee. Indentured Apprentice to the Riverside, San Bernardino, Mono, and Inyo Counties Sound and Communications Joint Apprenticeship Committee or the San Diego Sound & Communications Joint Apprenticeship Committee

Note: May be taken 2 times

Introduction to the sound and communication industry, electrical code, fundamentals of wiring methods, fastening devices, electrical conductors, circuits, voltage and data communication.

AP SC 102 Electrical Theory and Practices DC (4)

3 hours lecture-3 hours laboratory

Prerequisite: AP SC 101

Note: May be taken 2 times

Study of floor and plot plans, basic blueprint reading and circuit drawing, theory of magnetism, DC and AC generators, motors and transformers, on-the-job safety, first aid, electrical code, telephony and data communications.

AP SC 103 Electrical Theory and Practices AC (4)

3 hours lecture-3 hours laboratory

Prerequisite: AP SC 102

Note: May be taken 2 times

Study of apprenticeship, electrical inductance, capacitance and reactance, including grounded conductors, branch circuits, transformer principles, RCL circuits and filters.

AP SC 104 Semiconductor Electronics (4)

3 hours lecture-3 hours laboratory

Prerequisite: AP SC 103

Note: May be taken 2 times

Study of solid-state electronic theory and components, diodes, transistors, SCR, triacs, diacs, IC amplifiers and op amps.

AP SC 105 Introduction to Digital Electronics and Signaling Devices (4)

3 hours lecture-3 hours laboratory

Prerequisite: AP SC 104

Note: May be taken 2 times

Introduction to digital electronic technology and electronic equipment. Instruction includes basic digital systems, binary and decimal numbering systems, decision-making logic circuits, Boolean Algebra, flip-flops, counters, shift registers, encoders, decoders, ROMs, DC to AC converters and organization of these component blocks to accomplish manipulation of data.

AP SC 106 Management/Alarms/Codes/Circuits (4)

3 hours lecture-3 hours laboratory

Prerequisite: AP SC 105

Note: May be taken 2 times

Introduction to management, installation of security and fire alarm systems, the National Electrical Code as it relates to alarm installation and circuits as applied to alarm systems.

AP SC 107 Life Safety and Security System Application (4)

3 hours lecture-3 hours laboratory

Prerequisite: AP SC 106

Note: May be taken 2 times

Continuation of digital theory studies. Instruction expands coverage of Life Safety Systems, and introduces the theory and application of Nurse Call Systems and Security Systems with an emphasis on closed circuit television (CCTV) installation.

AP SC 108 Specialized Systems and Supervision Techniques (4)

3 hours lecture-3 hours laboratory

Prerequisite: AP SC 107

Note: May be taken 2 times

Study of specialized building systems including cable television systems (CATV), master antenna systems (MATV), and building automation systems. Training will cover aspects of job administration including personal computer use, job estimating, customer relations, and building system startup procedures.

AP SC 197 Sound and Communication Systems Installer 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: Indentured apprentice to the Riverside, San Bernardino, Mono, and Inyo Counties Sound and Communications Joint Apprenticeship Committee or the San Diego Sound & Communications Joint Apprenticeship Committee

Note: May be taken 4 times

Topics in Sound and Communication Systems Installer. See Class Schedule for specific topic covered. Course title will designate subject covered.

Work Experience (AP WE)**AP WE 110 Work Experience (1,2,3,4)**

5, 10, 15, or 20 hours laboratory

Prerequisite: Indentured apprentice to a designated Joint Apprenticeship and Training Committee

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

On-the-job experience for the duration of the apprenticeship period.

Arabic (ARAB)

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

COURSE OFFERINGS

ARAB 101A Arabic IA (3)

3 hours lecture

Note: Covers the first half of first semester Arabic.

Transfer acceptability: CSU: UC – ARAB 101A and 101B combined: maximum credit, 5 units: UC – both courses must be taken for transfer credit to be given.

Arabic 101A and 101B are equivalent to the first semester of an elementary level course in Arabic. This elementary level course is a study of the Arabic language and Arabic-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 Arabic.

ARAB 101B Arabic IB (3)

3 hours lecture

Prerequisite: ARAB 101A or one year of high school Arabic

Note: Covers the second half of first semester Arabic.

Transfer acceptability: CSU: UC – ARAB 101A and 101B combined: maximum credit, 5 units: UC – both courses must be taken for transfer credit to be given.

Arabic 101A and 101B are equivalent to the first semester of an elementary level course in Arabic. ARAB 101B is a continuation of ARAB 101A. This elementary level course is a study of the Arabic language and Arabic-speaking cultures, with emphasis on the development of communicative skills and basic structures.

ARAB 102A Arabic IIA (3)

3 hours lecture

Prerequisite: ARAB 101B or two years of high school Arabic

Note: Covers the first half of second semester Arabic.

Transfer acceptability: CSU: UC – ARAB 102A and 102B combined: maximum credit, 5 units: UC – both courses must be taken for transfer credit to be given.

Arabic 102A and 102B are equivalent to the second semester of an elementary level course in Arabic. This elementary level course is a study of the Arabic language and Arabic-speaking cultures, with emphasis on the development of communicative skills and basic structures.

ARAB 102B Arabic IIB (3)

3 hours lecture

Prerequisite: ARAB 102A or two years of high school Arabic

Note: Covers the second half of second semester Arabic.

Transfer acceptability: CSU: UC – ARAB 102A and 102B combined: maximum credit, 5 units: UC – both courses must be taken for transfer credit to be given.

Arabic 102A and 102B are equivalent to the second semester of an elementary course in Arabic. Arabic 102B is a continuation of Arabic 102A. This elementary level course is a study of the Arabic language and Arabic-speaking cultures, with emphasis on the development of communicative skills and basic structures.

ARAB 201A Arabic IIIA**(3)***3 hours lecture***Prerequisite:** ARAB 102B or three years of high school Arabic**Note:** Covers the first half of third semester Arabic.**Transfer acceptability:** CSU: UC – ARAB 201A and 201B combined: maximum credit, 5 units: UC – both courses must be taken for transfer credit to be given.

Arabic 201A and 201B are equivalent to the third semester of an intermediate course in Arabic. This intermediate level course is a study of the Arabic language and Arabic-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 Arabic. Class is largely conducted in Arabic.

ARAB 201B Arabic IIIB**(3)***3 hours lecture***Prerequisite:** ARAB 201A**Note:** Covers the second half of third semester Arabic.**Transfer acceptability:** CSU: UC – ARAB 201A and 201B combined: maximum credit, 5 units: UC – both courses must be taken for transfer credit to be given.

Arabic 201A and 201B are equivalent to the third semester of an intermediate level course in Arabic. ARAB 201B is a continuation of ARAB 201A. This intermediate level course is a study of the Arabic language and Arabic-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 Arabic. Class is largely conducted in Arabic.

Art (ART)

Contact the Art Department for further information, (760) 744-1150, ext. 2302

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.

In order to earn a certificate, students must achieve a minimum grade of "C" in 5 of the 6 certificate program courses.

Certificate of Proficiency

Program Requirements		Units
(Choose 5 of the courses listed, totaling 15 units)		
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
TOTAL UNITS		15

This program is also offered in Graphic Communications and Music.

Graphic Design

Prepares students in basic skills necessary to prepare a portfolio for application to graphic Design, environmental Design, and packaging Design programs at 4 year schools.

In addition, develops creative Design ability and conceptual skills in the printed media, motion graphics, and web Design.

A.A. Degree Major

Program Requirements		Units
ART 104	Design and Composition	3
ART 166	History of Art II	3
ART 200	Color/Light and Theory	3
ARTD 100	Graphic Design I	3
ARTD 150	Digital Concepts and Techniques in Art	3
ARTD 200	Graphic Design II- Lettering and Layout	3
ARTD 210	Typography Design	3
ARTD 220	Motion Design	3
ARTD 250	New Media Studio	3
ARTI 100	Introduction to Illustration	3
ARTI 246	Digital 3D Design and Modeling	3
ARTI 247	Digital 3D Design and Animation	3
BUS 150	Advertising	3
PHOT 100	Elementary Photography	3.5
	Final Art Portfolio Review	0

Electives (Select 6-7 units)

ART 120	Life Drawing and Composition I	3
ART 296	Special Projects	1,2,3
ARTI 220	Illustration II Digital Techniques	3
R GC / GC 140	Digital Imaging/Photoshop I	3
R GC / GC 152	Desktop Publishing/Illustrator	3
GC 160	DTP/Adobe In Design	3
RTV 275	Avid Editing for Television and Film	3
BMGT 105	Small Business Management	3
MUS 180	Digital Music	3
MUS 181 or	Digital Music II	
MUS 184	Electronic Ensemble	3
CE 100	Cooperative Education	1,2,3,4

TOTAL UNITS**48.5-49.5****Illustration**

Provides students with specific skills necessary to prepare a portfolio for application to Illustration programs at 4-year schools. In addition develops creative conceptual and Illustrative skills for use in advertising and story Illustration.

A.A. Degree Major

Program Requirements		Units
ART 104	Design and Composition	3
ART 120	Life Drawing and Composition I	3
ART 125	Head Drawing	3
ART 166	History of Art II	3
ART 200	Color/Light and Theory	3
ART 220 or	Oil Painting I	
ART 225	Acrylic Painting I	3
ARTD 150	Digital Concepts and Techniques in Art	3
ARTI 100	Introduction to Illustration	3
ARTI 200	Rendering	3
ARTI 210	Illustration I	3
ARTI 220	Illustration II, Digital Techniques	3
ARTI 230	Illustration III, Experimental Techniques	3
ARTI 246	Digital 3D Design and Modeling	3
ARTI 247	Digital 3D Design and Animation	3
	Final Art Portfolio Review	0

Electives (Select 3 units)

ART 121	Life Drawing and Composition II	3
ART 197B	Topics in Art - Painting	.5-3
ART 197F	Topics in Art – Drawing	.5-3
ART 235	Watercolor Painting I	3
ART 296	Special Projects	1,2,3
ARTD 100	Graphic Design I	3
ARTD 220	Motion Design	3
ARTD 250	New Media Studio	3
BUS 150	Advertising	3
BMGT 105	Small Business Management	3
CE 100	Cooperative Education	1,2,3,4
PHOT 100	Elementary Photography	3.5

TOTAL UNITS**45**

Interactive Media Design

The Interactive Media Design program is also offered in Drafting Technology and Graphic Communications.

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
GC/RGC 140 Digital Imaging/Photoshop I	3
GC 204 Motion Graphics for Multimedia-A	3
Electives (Select 2 courses)	
ART 241 Computer Graphics	3
ART 248 Character Animation	1.5
ARTD 150 Digital Concepts and Techniques in Art	3
ARTD 220 Motion Design	3
DT/RDT 128 Solid Works Intro 3D Design/Presentation	3
DT 182 3D Studio Max – Advanced 3D Modeling/Animation	3
GC 142 Digital Imaging/Photoshop III	3
GC 201 Intermediate Multimedia	3
ENTT/RTV 120 Basic TV Production	3
RTV 124 Staging and Lighting for TV	3
TOTAL UNITS	22.5 - 24

Emphasis in Multimedia Design

Program Requirements	Units
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/RGC 200 Introduction to Multimedia	3
GC 201 Intermediate Multimedia	3
GC 204 Motion Graphics/Multimedia-A	3
Electives (Select 2 courses)	
ARTD 150 Digital Concepts/Techniques in Art	3
ARTI 246 Digital 3D Design and Modeling	3
DT 180 3D Studio Max-Intro to Modeling/Animation	3
GC 100 Graphic Communications	3
GC/RGC 140 Digital Imaging/Photoshop I	3
GC/RGC 152 Desktop Publishing with Illustrator	3
GC/ART 197 Multimedia Project	3
GC/RGC 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

The Interactive Media Design program is also offered in Drafting Technology and Graphic Communication.

Pictorial Arts

Programs are designed to enable the student to acquire skills in producing marketable fine art for gallery exhibition and commissions, enter into the commercial area, and serve as a preparation for transfer to a four-year college or university. Transfer students should consult the four-year college or university catalog for specific requirements or see a Palomar College counselor.

Pictorial arts majors may select an emphasis in painting or printmaking within the program requirements.

A.A. Degree Major

Program Requirements	Units
ART 101 Methods and Materials	3
ART 102 Drawing and Composition I	3
ART 103 Drawing and Composition II	3
ART 104 Design and Composition	3
ART 105 3-Dimensional Form and Design	3
ART 165 History of Art I	3
ART 166 History of Art II	3
ART 200 Color/Light and Theory	3
Emphasis Requirements	15-18
Final Art Portfolio Review	0
TOTAL UNITS	39 - 42

Emphasis in Painting

Emphasis Requirements	Units
ART 120 Life Drawing and Composition I	3
ART 121 Life Drawing and Composition II	3
Plus 6 units selected from the following:	
ART 220 Oil Painting I	3
ART 221 Oil Painting II	3
ART 225 Acrylic Painting I	3
ART 226 Acrylic Painting II	3
Electives (Select 6 units)	
ART 130 Printmaking I	3
ART 131 Printmaking II	3
ART 197F Topics in Art – Drawing	1.5-3
ARTI 200 Rendering	3
ARTI 210 Illustration I, Traditional Techniques	3
ARTI 220 Illustration II Digital Techniques	3
ART 220, 221, 225, 226 (if not taken in emphasis area)	3
ART 230 Airbrush Painting I	3
ART 231 Airbrush Painting II	3
ART 235 Watercolor Painting I	3
ART 236 Watercolor Painting II	3
PHOT 110 Basic 35mm Color Photo	3

Emphasis in Printmaking

Emphasis Requirements	Units
ART 120 Life Drawing and Composition I	3
ART 130 Printmaking I	3
ART 131 Printmaking II	3
Electives (Select 6 units)	
ART 162 History of the Art of the American West	3
ART 163 History of the Arts of Asia	3
ART 164 History of the Traditional Arts of Africa/ Oceania/ Americas	3
ART 170 Gallery Management/Display I	3
ART 197F Topics in Art – Drawing	1.5-3
ART 220 Oil Painting I	3
ART 221 Oil Painting II	3
ART 225 Acrylic Painting I	3
ART 226 Acrylic Painting II	3
ART 230 Airbrush Painting I	3
ART 231 Airbrush Painting II	3
ART 235 Watercolor Painting I	3
ART 236 Watercolor Painting II	3
ARTI 210 Illustration I, Traditional Techniques	3
ARTI 220 Illustration II Digital Techniques	3
PHOT 110 Basic 35mm Color Photo	3

Three-Dimensional Arts

Programs are designed to enable the student to acquire skills in producing marketable fine art for gallery exhibition and commissions, enter into the commercial area, and serve as a preparation for transfer to a four-year college or university. Transfer students should consult the four-year college or university catalog for specific requirements or see a Palomar College counselor.

Three-dimensional arts majors may select an emphasis in ceramics, crafts, glass, jewelry and metalsmithing, or sculpture, within the program requirements.

A.A. Degree Major**Program Requirements**

	Units
ART 101 Methods and Materials	3
ART 102 Drawing and Composition I	3
ART 104 Design and Composition	3
ART 105 3-Dimensional Form and Design	3
ART 165 History of Art I	3
ART 166 History of Art II	3
Emphasis Requirements	22-24.5
Final Art Portfolio Review	0
TOTAL UNITS	40 – 42.5

Emphasis in Ceramics**Emphasis Requirements**

	Units
ART 135 Ceramics I	3
ART 136 Ceramics II	3
ART 250 Ceramics III	3
ART 260 Sculpture I	3
ART 265 Ceramic Sculpture I	3
ART 266 Ceramic Sculpture II	3

Electives (Select 6 units)

ART 137 Pottery Production	3
ART 140 Foundry Techniques/Sculpture I	3
ART 147 Design in Enamels	3
ART 160 Glassblowing-Offhand I	3
ART 261 Sculpture II	3
PHOT 100 Elementary Photography	3.5
PHOT 110 Basic 35mm Color Photo	3

Emphasis in Crafts**Emphasis Requirements**

	Units
ART 135 Ceramics I	3
ART 145 Design in Mixed Media	3
ART 146 Design in Wood	3
ART 147 Design in Enamels	3
ART 150 Jewelry/Metalsmithing Design I	3
ART 260 Sculpture I	3

Electives (Select 6 units)

ART 136 Ceramics II	3
ART 140 Foundry Techniques/Sculpture I	3
ART 151 Jewelry/Metalsmithing Design II	3
ART 155 Stained Glass I	3
ART 261 Sculpture II	3
ART 270 Jewelry/Metalsmithing Design III	3
ART 275 Stained Glass II	3
PHOT 100 Elementary Photography	3
PHOT 110 Basic 35mm Color Photo	3

Emphasis in Glass**Emphasis Requirements**

	Units
ART 135 Ceramics I	3
ART 145 Design in Mixed Media	3
ART 155 Stained Glass I	3
ART 160 Glassblowing-Offhand I	3
ART 260 Sculpture I	3
ART 280 Glassblowing-Offhand II	3

Electives (Select 4-6 units)

ART 140 Foundry Techniques/Sculpture I	3
ART 146 Design in Wood	3
ART 147 Design in Enamels	3
ART 150 Jewelry/Metalsmithing Design I	3
ART 275 Stained Glass II	3
ART 276 Cold Glass Design	1
ART 277 Glass Casting	1
PHOT 110 Basic 35mm Color Photo	3

Emphasis in Jewelry and Metalsmithing**Emphasis Requirements**

	Units
ART 145 Design in Mixed Media	3
ART 147 Design in Enamels	3
ART 150 Jewelry/Metalsmithing I	3
ART 151 Jewelry/Metalsmithing II	3
ART 205 Indirect Metal Forming	3
ART 270 Jewelry/Metalsmithing III	3

Electives (Select 6 units)

ART 135 Ceramics I	3
ART 140 Foundry Techniques/Sculpture I	3
ART 146 Design in Wood	3
ART 260 Sculpture I	3
ART 265 Ceramic Sculpture I	3
PHOT 110 Basic 35mm Color Photo	3

Emphasis in Sculpture**Emphasis Requirements**

	Units
ART 135 Ceramics I	3
ART 140 Foundry Techniques/Sculpture I	3
ART 260 Sculpture I	3
ART 261 Sculpture II	3
ART 265 Ceramic Sculpture I	3
ART 266 Ceramic Sculpture II	3

Electives (Select 6 units)

ART 136 Ceramics II	3
ART 145 Design in Mixed Media	3
ART 150 Jewelry and Metalsmithing I	3
ART 160 Glassblowing-Offhand I	3
ART 205 Indirect Metal Forming	3
ART 255 Foundry Techniques/Sculpture II	3
PHOT 110 Basic 35mm Color Photo	3

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 Ceramics courses for credit.) Ceramics and Jewelry and Metalsmithing classes are defined as activity courses.

ART 100 Introduction to Art (3)

3 hours lecture

Transfer acceptability: CSU; UC

Promotes an understanding and appreciation of art through slide-lectures, discussion, and museum visits. For non-art majors.

ART 101 Methods and Materials (3)

6 hours lecture/laboratory

Note: May be taken 2 times

Transfer acceptability: CSU

Introduction to the aesthetic and technical potential of a variety of materials and methods basic to various art disciplines. Concentration on the skills needed to use these materials in a two- and three-dimensional art.

ART 102 Drawing and Composition I (3)

6 hours lecture/laboratory

Note: May be taken 2 times

Transfer acceptability: CSU; UC; CAN ART 8

A basic studio course in the media and technique of drawing. An introduction to pictorial structure, visual elements, use of perspective, and rendering and sketching techniques. This course is designed to develop skills for both commercial and fine arts.

ART 103 Drawing and Composition II (3)

6 hours lecture/laboratory

Prerequisite: ART 102

Note: May be taken 2 times

Transfer acceptability: CSU; UC

The development of subject and theme concepts with varied approaches to composition and the use of media. Introduction to abstract composition and mixed media techniques as a preliminary to painting.

ART 104 Design and Composition (3)

6 hours lecture/laboratory

Note: May be taken 2 times

Transfer acceptability: CSU; UC; CAN ART 14

Basic instruction in flat design. The study of line, color, value, shape, texture, form, and the principles of composition. Experience in a variety of media. Essential to students of fine and commercial art, photography, graphic arts, architectural, and interior design.

ART 105 Three-Dimensional Form and Design (3)

6 hours lecture/laboratory

Note: May be taken 2 times**Transfer acceptability:** CSU; UC; CAN ART 16

Basic instruction in sculptural forms and structures. A variety of media is explored.

ART 120 Life Drawing and Composition I (3)

6 hours lecture/laboratory

Prerequisite: A minimum grade of "B" in at least one semester of a college-level drawing course**Note:** May be taken 2 times**Transfer acceptability:** CSU; UC; CAN ART 24

A basic course in the fundamentals of drawing the human figure. The use of the figure as an element of both naturalistic and expressive rendering.

ART 121 Life Drawing and Composition II (3)

6 hours lecture/laboratory

Prerequisite: ART 120**Note:** May be taken 2 times**Transfer acceptability:** CSU; UC—Credit Limitations

An exploration of the human figure as the basic subject of creative and experimental composition.

ART 123 Arts Across the Curriculum (3)

3 hours lecture

Note: Cross listed as: DNCE/MUS/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.

ART 125 Head Drawing (3)

6 hours lecture/laboratory

Prerequisite: ART 102 or ART 100**Note:** May be taken 2 times**Transfer acceptability:** CSU; UC

Introduction to human head drawing. Special emphasis on techniques designed to illustrate musculoskeletal relationships that distinguish differences in age, sex, and personality.

ART 130 Printmaking I (3)

6 hours lecture/laboratory

Prerequisite: ART 102**Note:** May be taken 2 times**Transfer acceptability:** CSU; UC; CAN ART 20

Introduction to the techniques of etching, aquatint, drypoint, photo engraving, and wood and linoleum cuts. Problems in multicolor intaglio and multicolor relief printing. Design and composition in relation to the media will be emphasized.

ART 131 Printmaking II (3)

6 hours lecture/laboratory

Prerequisite: ART 130**Note:** May be taken 2 times**Transfer acceptability:** CSU; UC

Continued practice in the creation of fine prints. Mixed media and the photointaglio process are explored.

ART 132 Lithography and Experimental Printmaking (1)

2 hours lecture/laboratory

Prerequisite: ART 102**Note:** May be taken 2 times

Introduction to the techniques of plate lithography and experimental lithographic processes.

ART 133 Etching (1)

2 hours lecture/laboratory

Prerequisite: ART 102**Note:** May be taken 2 times

Introduction to the techniques of etching, aquatint and drypoint.

ART 135 Ceramics I (3)

6 hours lecture/laboratory

Note: May be taken 2 times; maximum of 4 completions in any combination of ART 135, ART 136, ART 250**Transfer acceptability:** CSU; UC; CAN ART 6

An introduction to basic forming techniques in clay and various surface treatments.

ART 136 Ceramics II (3)

6 hours lecture/laboratory

Prerequisite: ART 135**Note:** May be taken 2 times; maximum of 4 completions in any combination of ART 135, ART 136, ART 250**Transfer acceptability:** CSU; UC

Advanced studies in handbuilding and wheel throwing techniques. Continuing study of various surface techniques. Techniques of glaze and facility maintenance.

ART 137 Pottery Production (3)

6 hours lecture/laboratory

Prerequisite: ART 135**Note:** May be taken 2 times**Transfer acceptability:** CSU

Wheel throwing production, kiln use and construction, mixing and maintaining glazes, studio maintenance, decorative techniques, and marketing skills and techniques.

ART 138 Ceramic Surface Decoration (1)

2 hours lecture/laboratory

Recommended preparation: ART 135, 136, and 250

A study of ceramic surface treatments and decorative techniques.

ART 139 Raku Techniques (1)

2 hours lecture/laboratory

Recommended preparation: ART 135, 136, and 250**Note:** May be taken 2 times

Exploration of the raku ceramic process and related earthenware decorative techniques.

ART 140 Foundry Techniques in Sculpture I (3)

6 hours lecture/laboratory

Prerequisite: ART 105**Note:** May be taken 2 times**Transfer acceptability:** CSU

Theory and practice in casting skills using foundry techniques.

ART 145 Design in Mixed Media (3)

6 hours lecture/laboratory

Note: May be taken 2 times**Transfer acceptability:** CSU; UC

Design and production of useful "one-of-a-kind" or "limited edition" objects of art. Attention to the visual as well as structural character of chosen materials. Media may include wood, metal, fibers, plastics, and bone and leather alone or in combination.

ART 146 Design in Wood (3)

6 hours lecture/laboratory

Note: May be taken 2 times**Transfer acceptability:** CSU; UC

Explores in depth the sculptural and functional qualities of wood. Original designs may include useful forms such as furniture, containers, and architectural ornaments as well as fantasy forms. Benefits students of three-dimensional art and wood technology.

ART 147 Design in Enamels (3)

6 hours lecture/laboratory

Recommended preparation: ART 104**Note:** May be taken 2 times**Transfer acceptability:** CSU

Exploration of the creative and aesthetic possibilities of enameling. Principles and techniques in two- and three- dimensional designs.

ART 150 Jewelry and Metalsmithing Design I (3)

6 hours lecture/laboratory

Note: Maximum of 4 completions in any combination of ART 150, ART 151, ART 270**Transfer acceptability:** CSU

Projects in two- and three-dimensional jewelrymaking and metalsmithing. Study of the relationship of design to materials and of contemporary metal working techniques.

ART 151 Jewelry and Metalsmithing Design II (3)

6 hours lecture/laboratory

Prerequisite: ART 150

Note: May be taken 2 times; maximum of 4 completions in any combination of ART 150, ART 151, ART 270

Transfer acceptability: CSU

Exploration of manipulation of metal and surface decoration including stone setting.

ART 155 Stained Glass I (3)

6 hours lecture/laboratory

Prerequisite: ART 104

Note: May be taken 2 times

Transfer acceptability: CSU

Introduction to the materials and processes involved in the creation of flat glass objects. Emphasis on design potential and creative possibilities of the medium.

ART 160 Glassblowing-Offhand I (3)

6 hours lecture/laboratory

Prerequisite: ART 104 or 105

Note: May be taken 2 times

Transfer acceptability: CSU

The study of the properties and structure of glass and materials, equipment, and techniques used to work it in offhand method.

ART 165 History of Art I: Survey of Western Art (3)

3 hours lecture

Transfer acceptability: CSU; UC; CAN ART 2; ART 165+166=CAN ART SEQ A

The art forms and styles of Western man from the Paleolithic period through Medieval Gothic. Emphasis on the contribution of religion, social and political structures, heritage, and inter-cultural contacts as they influence changes in form and style.

ART 166 History of Art II: Survey of Western Art (3)

3 hours lecture

Transfer acceptability: CSU; UC; CAN ART 4; ART 165+166=CAN ART SEQ A

The art forms and styles of Western man from the Renaissance to the present. Emphasis on the style of individual artists and national styles as well as the contribution of religious, social, and political influences

ART 167 History of Modern Art I: 19th Century Europe and America (3)

3 hours lecture

Transfer acceptability: CSU; UC

European and American painting, sculpture, and architecture from 1700 to 1900. Emphasis on the styles and contributions of individual artists as well as the influence of social, political, and cultural developments.

ART 168 History of Modern Art II: 20th Century Europe and America (3)

3 hours lecture

Transfer acceptability: CSU; UC

Twentieth Century European and American painting, sculpture, and architecture. Emphasis on the styles and contributions of individual artists as well as the aesthetic, political, and psycho-sociological motivations behind the art of the 20th century.

ART 182 Introduction to Arts Management (3)

9 hours laboratory

Note: Cross listed as AMS 182, DNCE 182, MUS 182, and 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.

ART 183 Internship in Arts Management (3)

9 hours laboratory

Prerequisite: AMS/DANCE/MUS or TA 182

Note: Cross listed as AMS 183, DNCE 183, MUS 183, and TA 183

Transfer acceptability: CSU

Practical experience in arts management in the visual and performing arts.

ART 197A Topics in Art – Printmaking (.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.

Short and extended term lecture workshops or laboratory courses in various specialized aspects of printmaking.

ART 197B Topics in Art – Painting (.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.

Short and extended term lecture-workshops or laboratory courses in various specialized aspects of painting.

ART 197C Topics in Art – Glass (.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

Short and extended term lecture workshops or laboratory courses in various specialized aspects of glass.

ART 197D Topics in Art – Ceramics (.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.

Short and extended term lecture workshops or laboratory courses in various specialized aspects of ceramics.

ART 197E Topics in Art – Sculpture (.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.

Short and extended term lecture workshops or laboratory courses in various specialized aspects of sculpture.

ART 197F Topics in Art – Drawing (.5-3)

1 to 6 hours lecture/laboratory

Note: May be taken 4 times for a maximum of 9 units

Transfer acceptability: CSU

Short and extended term lecture-workshops or laboratory courses in various aspects of drawing techniques.

ART 197G Topics in Art – Computer Art (.5-3)

1 to 6 hours lecture/laboratory

Note: May be taken 4 times for a maximum of 9 units

Transfer acceptability: CSU

Short and extended term lecture-workshops or laboratory courses in which a teacher utilizes and teaches special computer hardware/software relationships and processes to produce art.

ART 197H Topics in Art – General (.5-3)

1 to 6 hours lecture/laboratory

Note: May be taken 4 times for a maximum of 9 units

Transfer acceptability: CSU

Short and extended term lecture-workshops or laboratory courses in various aspects of art. Course title will designate subject covered.

ART 200 Color/Light and Theory (3)

6 hours lecture/laboratory

Prerequisite: ART 102 and 104

Note: May be taken 2 times

Transfer acceptability: CSU; UC

Investigations into the phenomenon of color and its use in art. Problems involving color and design in various media, including

acrylics and collage. Exploration of the role of color in Western art from late 19th Century to the present.

ART 205 Indirect Metal Forming (3)

6 hours lecture/laboratory

Prerequisite: ART 150 or 260

Note: May be taken 2 times

Transfer acceptability: CSU

Exploration of indirect metal forming in jewelry and small sculpture. Projects in lost wax centrifugal and gravity casting, electroforming, and metal spraying.

ART 213 Illustration/Life Drawing (1)

2 hours lecture/laboratory

Note: May be taken 3 times

Transfer acceptability: CSU

The study of techniques used in drawing and painting from both nude and costumed models.

ART 214 Head Painting (1)

2 hours lecture/laboratory

Note: May be taken 3 times

Transfer acceptability: CSU

Introduction to painting techniques as they apply to the human head. Critical analysis and application of color theory and mixing principles. Analysis of human facial planes, proportion and bone structure in the application of either oil or acrylic paint.

ART 220 Oil Painting I (3)

6 hours lecture/laboratory

Prerequisite: Completion of, or concurrent enrollment in, ART 103 and 200

Note: May be taken 2 times

Transfer acceptability: CSU; UC; CAN ART 10

Fundamental methods and concepts of studio painting using oil color as the primary medium. Concentration on gaining technical skills in pictorial composition, subject interpretation, brush handling, and the use of color. Exploration of historical and contemporary styles, attitudes, and techniques.

ART 221 Oil Painting II (3)

6 hours lecture/laboratory

Prerequisite: ART 220

Note: May be taken 2 times

Transfer acceptability: CSU; UC

Advanced projects in the concepts and techniques of oil painting with concentration on individual creative progress and development.

ART 225 Acrylic Painting I (3)

6 hours lecture/laboratory

Prerequisite: Completion of, or concurrent enrollment in, ART 103 and 200

Note: May be taken 2 times

Transfer acceptability: CSU; UC

Concepts of studio painting utilizing acrylic based colors as the primary medium. Exploration of different styles and techniques with emphasis on contemporary modes of expression. Concentration on gaining skills in composition, brush handling, and the use of color.

ART 226 Acrylic Painting II (3)

6 hours lecture/laboratory

Prerequisite: ART 225

Note: May be taken 2 times

Transfer acceptability: CSU; UC

Advanced projects in the concepts and techniques of acrylic painting with emphasis on individual creative progress and development.

ART 230 Airbrush Painting I (3)

6 hours lecture/laboratory

Prerequisite: Completion of, or concurrent enrollment in, ART 103 and 200

Note: May be taken 2 times

Transfer acceptability: CSU

Emphasis on developing skills in airbrush painting and masking techniques for use in fine arts, commercial art, and photo retouching. The theory, use, and maintenance of airbrushes and associated equipment.

ART 231 Airbrush Painting II (3)

6 hours lecture/laboratory

Prerequisite: ART 230

Note: May be taken 2 times

Transfer acceptability: CSU

Creative approaches to airbrush painting. A continued study of airbrush techniques used in fine arts, commercial art, and photo retouching.

ART 235 Watercolor Painting I (3)

6 hours lecture/laboratory

Note: May be taken 2 times

Transfer acceptability: CSU; UC

Fundamental approaches to the use of watercolors and other waterbase paints in creative painting. Concentration on both literal and expressive modes utilizing a variety of subjects.

ART 236 Watercolor Painting II (3)

6 hours lecture/laboratory

Prerequisite: ART 235

Note: May be taken 2 times

Transfer acceptability: CSU; UC

Advanced work in watercolor media.

ART 241 Computer Graphics (3)

6 hours lecture/laboratory

Recommended Preparation: ARTD 150

Note: May be taken 2 times

Transfer acceptability: CSU

Two dimensional graphics applications of the computer using Adobe Photoshop software. Explore relationship between computer media and traditional art media. Digital image processing and storage, digital painting methods and layout generation. Technical issues pertaining to generation of digital art.

ART 244 Illustration II Digital Techniques (3)

6 hours lecture/laboratory

Prerequisite: ARTD 150

Recommended preparation: ART 241

Note: May be taken 2 times

Transfer acceptability: CSU

An introduction to concepts and techniques used in the field of digital illustration. Critical thinking and visual problem solving using digital tools as well as the translation of traditional theory and principles will be stressed. Emphasis will be placed on the integration of several computer software programs and traditional media as a means of communicating and applying ideas into the various commercial art marketplaces.

ART 248 Character Animation (1.5)

3 hours lecture/laboratory

Note: May be taken 3 times

Transfer acceptability: CSU

Fundamentals of character animation and design. Hands on experience creating hand drawn animations. Drawings are scanned and assembled on the computer. Final output is transferred onto videotape.

ART 250 Ceramics III (3)

6 hours lecture/laboratory

Prerequisite: ART 136

Note: May be taken 2 times; maximum of 4 completions in any combination of ART 135, ART 136, ART 250

Transfer acceptability: CSU; UC

Creative and experimental handbuilding, advanced throwing, firing techniques, glaze evaluation, and special research.

ART 255 Foundry Techniques in Sculpture II (3)

6 hours lecture/laboratory

Prerequisite: ART 140

Note: May be taken 2 times

Transfer acceptability: CSU

Advanced theory and practices in casting skills using foundry techniques.

ART 260 Sculpture I (3)

6 hours lecture/laboratory

Prerequisite: Completion of, or concurrent enrollment in, ART 102 and 105

Note: May be taken 2 times

Transfer acceptability: CSU; UC; CAN ART 12

Design and fabrication of expressive three-dimensional forms. Exploration of both historical and contemporary sculptural materials with emphasis on 20th Century models of expression.

ART 261 Sculpture II (3)

6 hours lecture/laboratory 3

Prerequisite: ART 260

Note: May be taken 2 times

Transfer acceptability: CSU; UC

Advanced projects in the concept and creation of original sculpture.

ART 265 Ceramic Sculpture I (3)

6 hours lecture/laboratory

Prerequisite: ART 102 or 104 or 105, and ART 135

Note: May be taken 2 times

Transfer acceptability: CSU; UC

Creative projects and experimentation using clay as the primary material for non-utilitarian expressive forms.

ART 266 Ceramic Sculpture II (3)

6 hours lecture/laboratory

Prerequisite: ART 265

Note: May be taken 2 times

Transfer acceptability: CSU; UC

Advanced problems in creative and experimental uses of clay for non-utilitarian expressive forms.

ART 270 Jewelry and Metalsmithing Design III (3)

6 hours lecture/laboratory

Prerequisite: ART 151

Note: May be taken 2 times; maximum of 4 completions in any combination of ART 150, ART 151, ART 270

Transfer acceptability: CSU

Continued exploration of the manipulation of metal. Advanced projects in jewelry and metalsmithing.

ART 275 Stained Glass II (3)

6 hours lecture/laboratory

Prerequisite: ART 155

Note: May be taken 2 times

Transfer acceptability: CSU

Creative expression in flat glass. Emphasis on architectural and fine arts application of the medium. Painting, enameling, and etching techniques will be explored in depth.

ART 276 Cold Glass Design (1)

2 hours lecture/laboratory

Note: May be taken 3 times

Transfer acceptability: CSU

Applications of the materials and processes involved in the production of flat glass materials. Emphasis is on the design of stained glass and problem solving during fabrication of designs.

ART 277 Glass Casting (1)

2 hours lecture/laboratory

Note: May be taken 3 times

Transfer acceptability: CSU

The study of the properties of molten glass as applied to glass casting. The acquisition of knowledge through problem solving using open face glass casting techniques.

ART 280 Glassblowing-Offhand II (3)

6 hours lecture/laboratory

Prerequisite: ART 160

Note: May be taken 2 times

Transfer acceptability: CSU

Advanced problems in the creation of fine blown glass.

ART 295 Directed Study in Art (1,2,3)

3, 6, or 9 hours laboratory

Prerequisite: 18 units of college-level art including ART 102, 104 or 105, 165, and 166, and instructor's approval of proposed project or research

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.

Independent study for advanced students dealing with projects or research in areas not covered by regular classes. Students will work

under the guidance of an instructor.

ART 296 Special Projects (1,2,3)

2, 4, or 6 hours lecture/laboratory

Prerequisite: A minimum grade of "B" in 6 units of college-level course work in a specialized area of art, and instructor's approval of the proposed project

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.

A course for the student who has demonstrated a proficiency in art and wishes to work beyond existing classes or desires to pursue a project which does not fit into the context of existing classes. Students will work directly with an instructor.

Art - Design (ARTD)

Contact the Art Department for further information, (760) 744-1150, ext. 2302

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

Graphic Design

Prepares students in basic skills necessary to prepare a portfolio for application to graphic Design, environmental Design, and packaging Design programs at 4 year schools. In addition, develops creative Design ability and conceptual skills in the printed media, motion graphics, and web Design.

A.A. Degree Major

Program Requirements	Units
ART 104 Design and Composition	3
ART 166 History of Art II	3
ART 200 Color/Light and Theory	3
ARTD 100 Graphic Design I	3
ARTD 150 Digital Concepts and Techniques in Art	3
ARTD 200 Graphic Design II- Lettering and Layout	3
ARTD 210 Typography Design	3
ARTD 220 Motion Design	3
ARTD 250 New Media Studio	3
ARTI 100 Introduction to Illustration	3
ARTI 246 Digital 3D Design and Modeling	3
ARTI 247 Digital 3D Design and Animation	3
BUS 150 Advertising	3
PHOT 100 Elementary Photography	3.5
Final Art Portfolio Review	0

Electives (Select 6-7 units)

ART 120 Life Drawing and Composition I	3
ART 296 Special Projects	1,2,3
ARTI 220 Illustration II Digital Techniques	3
R GC/	
GC 140 Digital Imaging/Photoshop I	3
R GC/	
GC 152 Desktop Publishing/Illustrator	3
GC 160 DTP/Adobe In Design	3
RTV 275 Avid Editing for Television and Film	3
BMGT 105 Small Business Management	3
MUS 180 Digital Music	3
MUS 181 or Digital Music II	
MUS 184 Electronic Ensemble	3
CE 100 Cooperative Education	1,2,3,4

TOTAL UNITS 48.5-49.5

COURSE OFFERINGS

ARTD 100 Graphic Design I (3)

6 hours lecture/laboratory

Transfer acceptability: CSU

Design principles as they apply to graphic communication. Abstract and pictorial Design for the printed media. Film and architectural signage. Lettering is applied as an abstract Design element.

ARTD 150 Digital Concepts and Techniques in Art (3)*6 hours lecture/laboratory***Prerequisite:** ARTD 100**Note:** May be taken 2 times**Transfer acceptability:** CSU

An overview of vector based and pixel based computer applications, and how they are used in a creative environment. Understanding of the underlying logic of computer software will be taught with an emphasis on the role of the computer in all forms of modern art-making. Students will learn how to use the computer as a tool effectively while developing their own method of creating digital artwork. Cross-platform issues will be addressed, as well as file preparation for various output media.

ARTD 200 Graphic Design II – Lettering and Layout (3)*6 hours lecture/laboratory***Prerequisite:** ARTD 100**Recommended preparation:** ARTD 150**Note:** May be taken 2 times**Transfer acceptability:** CSU

The study of the historical roots and nomenclature of lettering forms and the development of grid systems to aid in the development of successful layout Designs. Design and assembly utilizing both hand skills and computer software will be taught.

ARTD 210 Typography Design (3)*6 hours lecture/laboratory***Recommended preparation:** ARTD 150**Note:** May be taken 2 times**Transfer acceptability:** CSU

Introduction to the historical roots and contemporary technology of typography. Provides a critical analysis of technical processes and elements through assignments that define its symbolic and communicative aspects.

ARTD 220 Motion Design (3)*6 hours lecture/laboratory***Recommended preparation:** ART 241**Note:** May be taken 3 times**Transfer acceptability:** CSU

An introduction to the concepts and techniques of animation and multimedia for personal computers using After Effects. Emphasis will be placed on the role of the artist and in the development process and as a key link in determining the success of the final project.

ARTD 250 New Media Studio (3)*6 hours lecture/laboratory***Prerequisite:** Enrollment based on portfolio review with list of criteria**Note:** May be taken 3 times**Transfer acceptability:** CSU

An advanced class using digital tools that focuses on collaborative creative projects. Joint concept development, communication, critical thinking and creative teamwork will be stressed. Emphasis will be placed on the integration of graphic design, illustration. 2-D and 3-D animation and fine art components into professional quality multimedia projects. Students from the Art Department will have the opportunity to collaborate with students from music and computer science.

Art - Illustration (ARTI)

Contact the Art Department for further information, (760) 744-1150, ext. 2302

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**Illustration**

Provides students with specific skills necessary to prepare a portfolio for application to Illustration programs at 4-year schools. In addition develops creative conceptual and Illustrative skills for use in advertising and story Illustration.

A.A. Degree Major

Program Requirements		Units
ART 104	Design and Composition	3
ART 120	Life Drawing and Composition I	3
ART 125	Head Drawing	3
ART 166	History of Art II	3
ART 200	Color/Light and Theory	3
ART 220 or	Oil Painting I	
ART 225	Acrylic Painting I	3
ARTD 150	Digital Concepts and Techniques in Art	3
ARTI 100	Introduction to Illustration	3
ARTI 200	Rendering	3
ARTI 210	Illustration I	3
ARTI 220	Illustration II, Digital Techniques	3
ARTI 230	Illustration III, Experimental Techniques	3
ARTI 246	Digital 3D Design and Modeling	3
ARTI 247	Digital 3D Design and Animation	3
	Final Art Portfolio Review	0
Electives (Select 3 units)		
ART 121	Life Drawing and Composition II	3
ARTD 100	Graphic Design I	3
ART 197B	Topics in Art - Painting	.5-3
ART 197F	Topics in Art – Drawing	.5-3
ART 235	Watercolor Painting I	3
ART 296	Special Projects	1,2,3
ARTD 220	Motion Design	3
ARTD 250	New Media Studio	3
BUS 150	Advertising	3
BMGT 105	Small Business Management	3
CE 100	Cooperative Education	1,2,3,4
PHOT 100	Elementary Photography	3,5
TOTAL UNITS		45

COURSE OFFERINGS**ARTI 100 Introduction to Illustration (3)***6 hours lecture/laboratory***Transfer acceptability:** CSU

A course on proportion and structure, quick sketching, gesture, and contour drawing. Included is the study of perspective and drawing of mechanical and natural forms by the use of line and value. Emphasis is placed on the evolutionary development of visual ideas.

ARTI 200 Rendering (3)*6 hours lecture/laboratory***Recommended preparation:** ART 103, ARTI 100**Note:** May be taken 2 times**Transfer acceptability:** CSU

Application of various media and techniques for illustrating known products and services or the illustration of design ideas for students in design and architecture. Emphasis is on the development of proficiency and the encouragement of comparison of student work with current professional work.

ARTI 210 Illustration I, Traditional Techniques (3)*6 hours lecture/laboratory***Prerequisite:** ARTI 100**Transfer acceptability:** CSU

Course work that reflects the types of assignments an illustrator may encounter in the industry, using a variety of traditional media and techniques. Contemporary principles of concept development and problem solving will be explored, using stylization, design, composition and color as methods of communication. Accurate analysis, historical reference, oral and graphic presentation of ideas, sketches and finished art will be stressed.

ARTI 220 Illustration II, Digital Techniques (3)*6 hours lecture/laboratory***Prerequisite:** ARTI 200 and ARTI 210**Note:** May be taken 2 times**Transfer acceptability:** CSU

A course for advanced illustration students that focuses on creating

non-traditional professional level commercial artwork. Media experimentation, and combination of traditional methods with digital applications is used to create finished pieces that are conceptually and visually interesting and strong. Students are encouraged to develop and strengthen personal and distinctive approaches to Illustration. Portfolio preparation for admission to high quality 4-year art and Design programs, or for entry into the work force will be examined and applied. Students will also gain insight into self-promotion and marketing strategies. Contracts, self-employment issues and billing procedures will be explained.

ARTI 230 Illustration III – Experimental Techniques (3)

6 hours lecture/laboratory

Prerequisite: ARTI 220

Corequisite: ARTI 210

Note: May be taken 3 times

Transfer acceptability: CSU

Coursework will reflect advanced illustration concepts, conceptually and technically. Students will combine experimental traditional and digital techniques to create projects that reflect a professional level of finish and format. Projects will focus on conceptual content and process, and represent a range of possible industry application, such as entertainment design, editorial illustration and illustrations for an interactive environment.

ARTI 246 Digital 3D Design and Modeling (3)

6 hours lecture/laboratory

Recommended preparation: ARTD 150

Note: May be taken 3 times

Transfer acceptability: CSU

Fundamentals of computerized 3-D modeling and Design. Hands on experience with modeling, lighting, developing texture maps and rendering

ARTI 247 Digital 3D Design and Animation (3)

6 hours lecture/laboratory

Recommended preparation: ARTD 220

Note: May be taken 3 times

Transfer acceptability: CSU

Concepts and techniques of 3-dimensional animation using ElectricImage software. The course will provide an understanding of the production, animation and postproduction process. Concepts and techniques of 3-dimensional animation using Maya software. The course will provide an understanding of the production, animation and postproduction process.

Astronomy (ASTR)

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

PLANETARIUM

Palomar College offers several types of planetarium programs for the community. School programs are presented on Tuesday and Thursday mornings for area elementary and secondary schools. The planetarium also offers two evening shows a month, open to the public. For further information, contact the planetarium at (760) 744-1150, ext. 2833 or the Earth Sciences Department.

PROGRAM OF STUDY

Astronomy

Provides the student with sufficient background to begin upper division course work. Transfer students should consult the four-year college or university catalog for specific requirements or see a Palomar College counselor. Students pursuing a major in Astronomy at San Diego State University must complete a minor in Mathematics.

A.A. Degree Major or Certificate of Achievement

Program Requirements		Units
ASTR 100	Principles of Astronomy	3
ASTR 120	Planets, Moons and Comets	3
ASTR 105L	Introduction to Astronomy Laboratory	1
MATH 140	Calculus/Analytic Geometry, First Course	5
MATH 141	Calculus/Analytic Geometry, Second Course	4
MATH 205	Calculus/Analytic Geometry, Third Course	4
PHYS 230	Principles of Physics	5
PHYS 231	Principles of Physics	5
PHYS 232	Principles of Physics	4
TOTAL UNITS		34

Recommended Electives: ASTR 210, 295

COURSE OFFERINGS

ASTR 100 Principles of Astronomy (3)

3 hours lecture

Transfer acceptability: CSU; UC

The fundamental nature of the night sky as understood by pre-20th century scientists. Properties of the solar system, stars, black holes, galaxies, and extragalactic objects. Interstellar communication and extraterrestrial life.

ASTR 105L Introduction to Astronomy Laboratory (1)

3 hours laboratory

Prerequisite: Completion of, or concurrent enrollment in, ASTR 100, 120

Transfer acceptability: CSU; UC

Exploration of the techniques used in astronomy to determine the physical properties of stars and galaxies. The physical nature of light and the optical principles of a telescope are also explored. Measurements of planetary and stellar phenomena are used to investigate the astronomical methods of determining the size, composition and age of the universe.

ASTR 120 Planets, Moons, and Comets (3)

3 hours lecture

Note: Cross listed as GEOL 120

Transfer acceptability: CSU; UC

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.

ASTR 197 The Universe: Contemporary Topics in the Space Sciences (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 4 times

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

Selected topics in astronomy and space sciences, emphasizing current research and discoveries. Refer to the Class Schedule for specific topics covered.

ASTR 210 Life in the Universe (3)

3 hours lecture

Prerequisite: ASTR 100 or 120

Transfer acceptability: CSU

A scientific exploration of life in the universe using the findings of astronomy, biology, and chemistry. Topics include the development of life and its environments on Earth, the search for life in the cosmos, interstellar communications and travel, and the effects of contact.

ASTR 295 Directed Study in Astronomy (1,2,3)

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

Prerequisite: ASTR 100 or 120

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.

Athletics and Competitive Sports (ACS)

Contact the Athletics Program for further information, (760) 744-1150, ext. 2460

Palomar College offers intercollegiate sports for men and women. They include softball, basketball, golf, tennis, soccer, volleyball, swimming and diving, water polo, football, wrestling, cross country, and baseball. Teams will compete in one of four conferences: Mission Conference, Orange Empire Conference, South Coast Conference, and Pacific Coast Conference. Member colleges are located in the Los Angeles, Orange County, Riverside, and San Diego areas. In order to participate in intercollegiate athletics a student must fulfill the following requirements:

1. Obtain a physical clearance by the team physician.
2. Enroll in 12 units. Students are encouraged to register for a minimum of 9 units in courses other than Physical Education activity classes or Athletics and Competitive Sports classes.
3. Successfully complete 24 units prior to a second season of participation. A minimum of 18 units must be completed in courses other than Physical Education activity classes or Athletics and Competitive Sports classes.
4. Maintain a 2.0 or higher grade point average in all course work.
5. Participate in the Palomar College matriculation program which includes English, math and reading skills assessment.
6. Participate in the Palomar College Athletic Academic Advisement Program which includes:
 - a. Establishment of an Individual Education Plan prior to second semester of enrollment.

- b. Academic assessment of course progress following the 4th, 8th, and 12th week of each semester.
- c. Fulfilling tutorial or study hall requirements as assigned by the instructor advisor.

INTERCOLLEGIATE ATHLETIC COURSE OFFERINGS

Courses numbered under 100 are not intended for transfer credit.

ACS 50 Introduction to Collegiate Athletics (1)

1 hour lecture

Program for matriculation, study skills, eligibility rules, substance abuse, responsibilities of being a student athlete, training, and nutrition.

The following courses provide students with the opportunity to develop advanced skills and the strategies in specific sports which will be applied to competitive situations. A minimum of 175 hours of student participation is required.

ACS 101	Intercollegiate Softball (Women)	(2)
ACS 110	Intercollegiate Basketball (Men/Women)	(2)
ACS 115	Intercollegiate Golf (Men/Women)	(2)
ACS 120	Intercollegiate Tennis (Men/Women)	(2)
ACS 125	Intercollegiate Soccer (Men/Women)	(2)
ACS 130	Intercollegiate Volleyball (Men/Women)	(2)
ACS 135	Intercollegiate Swim/Diving (Men/Women)	(2)
ACS 140	Intercollegiate Water Polo (Men/Women)	(2)
ACS 145	Intercollegiate Football (Men)	(2)
ACS 150	Intercollegiate Wrestling (Men)	(2)
ACS 155	Intercollegiate Baseball (Men)	(2)
ACS 160	Intercollegiate Cross Country (Men/Women)	(2)

Note: Each course may be taken 3 times

Transfer acceptability: CSU; UC - max credit combined with PE activity courses, 4 units

Automotive Technology (AT)

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

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

Auto Body Work

A.A. Degree Major or Certificate of Achievement

Program Requirements	Units
R AT 50 Auto Body Repair I	4
R AT 51 Auto Body Repair II	4
R AT 55 Auto Refinishing I	4
R AT 56 Auto Refinishing II	4

Elective Courses (Select 6 Units)

AT 100 Auto Maintenance and Minor Repair	3
AT 105 Automotive Electricity	2
CE 100 Cooperative Education	1,2,3,4
IT 100 Technical Mathematics	3
WELD 100 Welding I	3
TOTAL UNITS	22

The Auto Body Work program is also offered in ROP Auto Technology.

Auto Chassis and Drive Lines

A.A. Degree Major or Certificate of Achievement

Program Requirements	Units
IT 100 Technical Mathematics	3
R AT 50 or WELD 100 Auto Body Repair I Welding I	3,4
AT 105 Automotive Electricity	2
AT 120 Automatic Transmissions and Drive Lines	3
AT 130 Automotive Brakes	3
AT 135 Front End Alignment and Wheel Service	3
AT 140 Front Drive Transmissions	4
AT 197 Associated Studies in Automotives	3
AT 220 Advanced Automatic Transmissions	3
TOTAL UNITS	27-28

Electronic Tune-Up and Computer Control Systems

A.A. Degree Major or Certificate of Achievement

Program Requirements	Units
IT 100 Technical Mathematics	3
AT 105 Automotive Electricity	2
AT 110 Automotive Tune-up and Engine Analysis	3
AT 115 Automotive Carburetion and Fuel Systems	3
AT 197 Associated Studies in Automotives	3
AT 210 Specialized Automotive Electronics	3
AT 215 Automotive Emission Control	3

Electives (Select 6-7 units)

AT 100 Auto Maintenance and Minor Repair	3
AT 140 Front Drive Transmissions	4
AT 145 Auto Emissions/Diagnosis	3
DMT 70/ RDMT 70 or DMT 55/ Med-Duty Diesel Engine Tune-up	
RDMT 55 Heavy-Duty Diesel Tune-up/Analysis	3
WELD 100 Welding I	3
CE 100 Cooperative Education	2,3
TOTAL UNITS	26-27

Mechanics - General

A.A. Degree Major or Certificate of Achievement

Program Requirements	Units
IT 100 Technical Mathematics	3
AT 197 Associated Studies in Automotives	3
AT 105 Automotive Electricity	2
AT 110 Automotive Tune-up and Engine Analysis	3
AT 120 Automatic Transmissions and Drive Lines	3
AT 125 Automotive Machining	3
AT 130 Automotive Brakes	3
AT 225 Automotive Engine Rebuilding	3
AT 140 Front Drive Transmissions	4
R AT 50 or WELD 100 Auto Body Repair I Welding I	2,3,4

Electives (Select 2 courses)

AT 100 Auto Maintenance and Minor Repair	3
AT 115 Automotive Carburetion and Fuel Systems	3
CE 100 Cooperative Education	2,3,4
TOTAL UNITS	34-38

COURSE OFFERINGS

AT 100 Auto Maintenance and Minor Repair (3)

2 hours lecture-3 hours laboratory

Transfer acceptability: CSU

Designed for the student with little or no background in the automotive field. The course covers many maintenance and minor repair items as well as basic theory of operation. The areas

covered include batteries, cooling systems, drive belts, lubrication, brakes, tires, and consumer education.

AT 105 Automotive Electricity (2)
4 hours lecture/laboratory

Auto electrical systems including A.C. generators, batteries, solid-state starters, wiring diagrams, and/or electrical troubleshooting that includes solid-state and low voltage-low amperage systems.

AT 110 Automotive Tune-Up and Engine Analysis (3)
2 hours lecture-3 hours laboratory

The use of tune-up testing and diagnostic equipment; the study of conventional and electronic ignition systems; compression, cylinder balance, and dynamometer testing.

AT 115 Automotive Carburetion and Fuel Systems (3)
2 hours lecture-3 hours laboratory

The principles, technical knowledge, and work experience in the field of carburetion. Specific topics include single, dual, and four-barrel carburetors; fuel injection; fuel supply systems; and combustion evaluation instruments.

AT 120 Automatic Transmissions and Drive Lines (3)
2 hours lecture-3 hours laboratory

The hydraulic and mechanical function and repair of automatic transmissions. The disassembly, inspection, reassembly, and testing of three speed conventional transmissions, clutches, universal joints, and differentials.

AT 125 Automotive Machining (3)
6 hours lecture/laboratory

The various testing and machining operations involved in an automotive machine shop. Areas covered include cylinder head service and repair, pin fitting, cylinder boring, milling, align boring, and various other automotive machining and measuring techniques.

AT 130 Automotive Brakes (3)
2 hours lecture-4 hours laboratory

The hydraulic and mechanical function of automotive brake systems. Brake troubleshooting, complete system repair, and overhaul of power, drum, and disc brakes. Preparation for the State Brake License.

AT 135 Front End Alignment and Wheel Service (3)
2 hours lecture-4 hours laboratory

The repair and adjustment of the undercarriage of the automobile. Included are such areas as steering, geometry, turn radius, ball joints, toe track, camber, caster, suspension, bearing service, wheel balance, and tire wear identification. Preparation for the State Lamp License.

AT 140 Front Drive Transmissions (4)
3 hours lecture-3 hours laboratory

Training in recent production of import and domestic front drive power trains including manual transmission, automatic transmission, differential systems, and drive axles.

AT 145 Auto Emissions, Diagnosis, Drivability, and Repair (3)
6 hours lecture/laboratory

Auto emissions diagnosis and repair using an individual baseline approach and loaded-mode testing equipment to solve emission failures. Includes use of scan tools, digital storage oscilloscopes, and inflight analyzers to logically repair the vehicles.

AT 196 Special Problems in Automotives (1,2,3)
3, 6, or 9 hours laboratory

Recommended preparation: Completion of a minimum of 12 units in Automotive Technology (may include 6 concurrent Automotive Technology units)

Note: May be taken four times

Special study in an area of interest related to automotives; generally research in nature. The content to be determined by the need of the student under signed contract with the instructor.

AT 197 Associated Studies in Automotives (3)
3 hours lecture

Applied science and technology as related to the automotive field. Areas covered include metrics, Ohms Law and electron theory, metal alloys and their properties and uses, thermal expansion, gas laws, limits and fits, and friction and torque.

AT 210 Specialized Automotive Electronics (3)
2 hours lecture-3 hours laboratory

Recommended preparation: AT 105 or 110

Electronic principles as they pertain to the automobile. Identification, diagnosis, repair, and verification of malfunctioning electronic components is the major objective of the course. Computer controls fundamentals and diagnosis of GM systems, 1981-1990.

AT 215 Automotive Emission Control (3)
3 hours lecture-2 hours laboratory

Recommended preparation: AT 110 and 115

Auto emission controls as prescribed by Federal Law and California Air Resources Board. Analysis and testing of emission controls will be presented. Study of current laws for state exam preparation.

AT 220 Advanced Automatic Transmissions (3)
6 hours lecture/laboratory

Prerequisite: AT 120

Advanced specialized training in automatic transmissions currently in use in General Motors, Ford, and Chrysler cars and light trucks.

AT 225 Automotive Engine Rebuilding (3)
2 hours lecture-4 hours laboratory

The complete rebuilding of at least one automobile engine using the machine tools and techniques of industry.

Biology (BIOL)

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

Biology – General

A.A. Degree Major or Certificate of Achievement

Program Requirements		Units
BIOL 200	Foundations of Biology I	5
BIOL 201	Foundations of Biology II	5
ZOO 100 or	General Zoology	4
ZOO 101/101L	Animal Kingdom	4
Group One (Select 3-4 units)		
BOT 101/101L	General Botany	4
BOT 110	Botany of Spring Wildflowers	4
BOT 115	Plants and People	3
Group Two (Select 4-5 units)		
BIOL 114/114L	Ecosystem Biology	4.5-5
BIOL 118/118L	General Ecology	4
BIOL 130 or	Marine Biology	4
BIOL 131/131L	Marine Biology	4
ZOO 115 or	Natural History of Animal Life	4
ZOO 116/116L	Natural History of Animal Life	4

Group Three (Select 9-11 units)

Biology	Any course not used above (100 and up)
Botany	Any course not used above
Microbiology	Any course
Zoology	Any course not used above

MINIMUM TOTAL UNITS 32

Recommended Courses: BIOL 215; CHEM 100, 110, 110L, 115, 115L; MATH 110, 115, 135; CSIS 105

Biology - Preprofessional

Provides intensive lower division preparation for pursuing advanced studies in biological science, premedical, pre dental, or preveterinarian programs leading towards a Bachelor's degree and beyond.

Students are advised to consult catalogs of the institution to which they plan to apply to determine special or additional requirements, or see a Palomar College Counselor.

A.A. Degree Major or Certificate of Achievement

Program Requirements	Units
BIOL 200 Foundations of Biology I	5
BIOL 201 Foundations of Biology II	5
CHEM 110/110L General Chemistry and Laboratory	5
CHEM 115/115L General Chemistry and Laboratory	5
CHEM 220 Organic Chemistry	5
CHEM 221 Organic Chemistry	5
MATH 140 Calculus/Analytic Geometry, First Course	5
MATH 141 Calculus/Analytic Geometry, Second Course	4
TOTAL UNITS	39

Recommended Electives: BIOL 215; MATH 205; PHYS 230, 231, 232; ZOO 203

COURSE OFFERINGS

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

*UC credit limitations –

- BIOL 100, 101/101L, 102 and 200 combined: maximum credit, 4 units
- No credit for BIOL 100 and 101/101L if taken after 200 or 201
- No credit for BIOL 102 if taken after 100, 101/101L or 200 or 201
- BIOL 105, 106/106L and ZOO 145/145L combined: maximum credit, 4 units
- BIOL 114/114L, 118/118L combined: maximum credit, 4 units
- BIOL 130 and 131/131L combined: maximum credit 4 units
- BIOL 185, FCS 165, FCS 185, and HE 165 combined: maximum credit, one course
- BIOL 215, MATH 120, SOC 205, and PSYC 205 combined: maximum credit, one course

BIOL 45A Field Studies in Natural History (.5-3)

1 to 6 hours lecture/laboratory

Note: May be taken four times; designed for families. Recommended for children between the ages of 8-14. Parent or guardian must accompany children. See class schedule or contact the Life Sciences Department for locality to be visited, and more information. Fee charged.

Field studies of plant and animal species encountered in various habitats, including systematics and major structural and functional characteristics of the taxonomic groups to which these species belong, and emphasizing each species particular adaptations that favor its survival in its natural habitat.

BIOL 47 Biology 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 Biology. See class schedule for specific topic covered. Course title will designate subject covered.

BIOL 100 General Biology (4)

3 hours lecture-3 hours laboratory

Note: Not open to students with prior credit in BIOL 101 or 101L, BIOL 102, BIOL 105, BIOL 106/106L.

Transfer acceptability: CSU; UC*; CAN BIOL 2

Basic principles of general biology as they relate to the cellular, organismic, and population levels of organization. Includes cell ultrastructure and function, energy transfer, reproduction, genetics, evolution, diversity of organisms, and ecology. *Not recommended for students interested in Biology, Zoology, Botany, Premed, or related majors (see Biology 200 and Biology 201).*

BIOL 101 General Biology (Lecture) (3)

3 hours lecture

Note: Not open to students with prior credit in BIOL 100

Transfer acceptability: CSU; UC*; BIOL 101+101L= CAN BIOL 2

Basic principles of general biology as they relate to the cellular, organismic, and population levels of organization. Includes cell ultrastructure and function, energy transfer, reproduction, genetics, evolution, diversity of organisms, and ecology.

BIOL 101L General Biology (Laboratory) (1)

3 hours laboratory

Prerequisite: Completion of, or concurrent enrollment in, BIOL 101 or BIOL 114

Note: Not open to students with prior credit in BIOL 100, BIOL 102, BIOL 105, BIOL 106/106L.

Transfer acceptability: CSU; UC*; BIOL 101+101L= CAN BIOL 2

Laboratory exercises in cell structure and function, energy transfer, reproduction, genetics, and ecology. *This is a general education course intended for non-science majors.*

BIOL 102 Molecules and Cells (4)

3 hours lecture-3 hours laboratory

Recommended preparation: MATH 50

Transfer acceptability: CSU; UC*

The basic principles of biological systems including the chemistry of life, cell structure and function, energy transfer, reproduction, and genetics.

BIOL 105 Biology with a Human Emphasis (4)

3 hours lecture-3 hours laboratory

Note: Not open to students with prior credit in BIOL 100, BIOL 101/101L, BIOL 102, BIOL 106/106L.

Transfer acceptability: CSU; UC*

Principles of cellular, organismal and population biology as exemplified by, and relating to, the human organism. Laboratory includes study of cells, tissues, and mammalian organ systems.

BIOL 106 Biology with a Human Emphasis (Lecture) (3)

3 hours lecture

Note: Not open to students with prior credit in BIOL 100, BIOL 101/101L, BIOL 102, BIOL 105

Transfer acceptability: CSU; UC

Principles of cellular, organismal and population biology as exemplified by, and relating to, the human organism.

BIOL 106L Biology with a Human Emphasis (Laboratory) (1)

3 hours laboratory

Prerequisite: Completion of, or concurrent enrollment in, BIOL 106

Note: Not open to students with prior credit in BIOL 100, BIOL 101/101L, BIOL 102, BIOL 105

Transfer acceptability: CSU; UC

Laboratory experiences designed to demonstrate cellular structure and function as they relate to the human organism. An examination of major body systems is included.

BIOL 107 Evolutionary Biology (3)

3 hours lecture

Transfer acceptability: CSU; UC

Biological concepts related to the origin of species and the evolution of the diversity of life. Topics include scientific process, basic chemistry, biochemistry, genetics, evolutionary mechanisms, speciation, and evolution of major taxonomic groups of organisms.

BIOL 110 Human Genetics (3)

3 hours lecture

Transfer acceptability: CSU; UC

Principles of human inheritance including gene transmission, genetic diseases, pedigree analysis, molecular genetics, immunogenetics, and population genetics; relationships to other fields of study will be emphasized.

BIOL 114 Ecosystem Biology (Lecture) (3)

3 hours lecture

Note: See also BIOL 114L**Transfer acceptability:** CSU; UC*

Basic principles of general biology as they relate to exemplary ecosystems.

BIOL 114L Ecosystem Biology (Laboratory) (1.5-2)

4 ½ or 6 hours laboratory

Prerequisite: Completion of, or concurrent enrollment in, BIOL 101 or 114

Note: A fee is required, and additional costs may be incurred. Contact the Life Sciences Department or see the schedule of classes for specific information about the laboratory field sites, dates and fees. **Transfer acceptability:** CSU; UC*

Laboratory and field experiences to illustrate and observe biology as it relates to exemplary ecosystems. Typical field sites include the Greater Yellowstone ecosystem, Central America, or the Sea of Cortez.

BIOL 118 General Ecology (Lecture) (3)

3 hours lecture

Transfer acceptability: CSU; UC*

Basic concepts of evolution, population ecology, community ecology, and ecosystem ecology.

BIOL 118L General Ecology (Laboratory) (1)

3 hours laboratory

Prerequisite: Completion of, or concurrent enrollment in, BIOL 118**Transfer acceptability:** CSU; UC*

Provides hands-on experiences with ecological concepts, methods, and problem-solving techniques by using the plants and animals of local communities in their natural settings. The majority of laboratory sessions will be devoted to off-campus field studies.

BIOL 130 Marine Biology (4)

3 hours lecture-3 hours laboratory

Note: Not open to students with prior credit in BIOL 131 or 131L**Transfer acceptability:** CSU; UC*

An introduction to marine biology with an emphasis on the adaptations, classification, and ecology of marine organisms as well as current issues in marine biology. A survey of local marine organisms and habitats. Participation on field trips as scheduled is required.

BIOL 131 Marine Biology (Lecture) (3)

3 hours lecture

Note: Not open to students with prior credit in BIOL 130**Transfer acceptability:** CSU; UC*

An introduction to marine biology with an emphasis on the adaptations, classification, and ecology of marine organisms as well as current issues in marine biology.

BIOL 131L Marine Biology (Laboratory) (1)

3 hours laboratory (1)

Prerequisite: Completion of, or concurrent enrollment in, BIOL 131**Note:** Not open to students with prior credit in BIOL 130**Transfer acceptability:** CSU; UC*

A survey of local marine organisms and local marine habitats. A field trip oriented course; participation on field trips as scheduled is required.

BIOL 135 Marine Mammals: Biology and Ecology (3)

3 hours lecture

Note: Cross listed as ZOO 135**Transfer acceptability:** CSU; UC

Basic biology and ecology of marine mammals. Special emphasis on behavior, adaptations, and conservation.

BIOL 160 Biotechnology Preparatory Course (5)

3 hours lecture-6 hours laboratory

Recommended preparation: MATH 50**Transfer acceptability:** CSU

This course is intended as a preparation course for students interested in further studies in biotechnology. The course provides the basic knowledge in math, chemistry, biology, and microbiology for additional biotechnology coursework. Topics include the fundamental chemical processes common in prokaryotic and eukaryotic biology, chemistry of biomolecules, cellular and molecular biology, gene expression and genetic engineering. The laboratory experience provides basic skills and techniques essential to advanced biotechnology courses.

BIOL 161 Biotechnology Methods (4)

2 hours lecture, 6 hours laboratory

Prerequisite: MATH 50, BIOL 100 and CHEM 100, or MATH 50 and BIOL 102, or MATH 50 and BIOL 160, or MATH 50 and BIOL 200**Transfer acceptability:** CSU

Biotechnology Methods includes current basic theory and laboratory skills used in biotechnology industry. Lectures cover concepts such as recombinant DNA technology and basic protein biochemistry. The laboratory illustrates lecture topics through preparing a recombinant plasmid, transformation of the recombinant plasmid into a suitable bacterial host, verification of the process by identification and analysis of the recombinant bacteria, growth of the recombinant bacteria, expression of the protein encoded by the recombinant plasmid and purification and analysis of the expressed protein.

BIOL 185 Science of Human Nutrition (3)

3 hours lecture

Note: Cross listed as FCS 185**Transfer acceptability:** CSU; UC

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.

BIOL 195A Field Studies in Natural History (1,2,3)

2, 4, or 6 hours lecture/laboratory

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

Field studies of plant and animal species encountered in various habitats, including systematics and major structural and functional characteristics of the taxonomic groups to which these species belong, and emphasizing each species' particular adaptations that favor its survival in its natural habitat. See Class Schedule for locality to be visited.

BIOL 195B Field Studies in Ecology (1,2,3)

2, 4, or 6 hours lecture/laboratory

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

Field study of the fauna and biota of selected geographic regions, with emphasis placed upon field identification, observation and interpretation of behavioral and ecological interrelationships of living things to their environment and to one another. See Class Schedule for locality to be visited.

BIOL 195C Field Studies in Marine Biology (1,2,3)

2, 4, or 6 hours lecture/laboratory

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

Field study of the fauna and biota of marine intertidal and subtidal habitats of selected geographic regions, with emphasis placed upon field identification, observation and interpretation of behavioral and ecological interrelationships of living things to their environment and to one another. See Class Schedule for locality to be visited.

BIOL 195D Field Studies in Island Ecology (1,2,3)

2, 4, or 6 hours lecture/laboratory

Note: Fee charged; may be taken 4 times

Transfer acceptability: CSU

Field study of the unique ecology of islands, emphasizing systematics, speciation, observation and interpretation of the interactions of indigenous and exotic biota, and how the biotic communities of the study island(s) have adapted to the special limitations of their confined environments. See *Class Schedule* for locality to be visited.

BIOL 195E Field Studies in Tropical Biology (1,2,3)
2, 4, or 6 hours lecture/laboratory

Note: Fee charged; may be taken 4 times

Transfer acceptability: CSU

Field study in the fauna and flora of selected tropical regions, with emphasis placed upon field identification, observation and interpretation of behavioral and ecological interrelationships of living things to their environment and to one another. See *Class Schedule* for locality to be visited.

BIOL 197 Biology 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 Biology. See *Class Schedule* for specific topic offered. Course title will designate subject covered.

BIOL 200 Foundations of Biology I (5)

3 hours lecture-6 hours laboratory

Prerequisite: Completion of, or concurrent enrollment in, CHEM 110

Transfer acceptability: CSU; UC*

Molecular and cellular biology. Transmission, molecular, and population genetics. Aspects of reproduction of prokaryotes and eukaryotes. Principles of evolution and systematics. Recommended for biology majors.

BIOL 201 Foundations of Biology II (5)

3 hours lecture-6 hours laboratory

Prerequisite: Completion of, or concurrent enrollment in, BIOL 200

Transfer acceptability: CSU; UC*

An examination of the diversity of life, as seen in the Eubacteria, Archaea, and Eukarya, emphasizing the integration of structure and function, development, life histories, phylogenetics, animal behavior, and ecology. Recommended for biology majors.

BIOL 215 Introduction to Biostatistics (4)

3 hours lecture-3 hours laboratory

Prerequisite: A minimum grade of 'C' in MATH 110, and a minimum grade of 'C' in BIOL 201

Note: This course does not qualify for mathematics credit

Transfer acceptability: CSU; UC*; max credit for one course: BIOL 215, PSYC 205, or SOC 205 and MATH 120, one course

An introduction to the quantitative analysis of biological data. Founded on the principles of the scientific process, this course provides experience in the design of biological experiments and the appropriate analysis and interpretation of biological data.

BIOL 295 Directed Study in Life Science (1,2,3)

3, 6, or 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 skills and/or proficiencies in biology 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.

Botany (BOT)

Contact the Life Sciences Department for further information, (760) 744-1150, ext. 2275

COURSE OFFERINGS**BOT 100 General Botany (4)**

3 hours lecture-3 hours laboratory

Note: Not open to students with prior credit in BOT 101 or 101L.

Transfer acceptability: CSU; UC – BOT 100 and 101/101L combined: maximum credit, 4 units; CAN BIOL 6

The diversity, structure, and function of major plant groups including cellular metabolism, soil-water relationships, classification, genetics, life cycle patterns, growth, and the basic ecological and evolutionary concepts of botany. This is a general education course intended for non-science majors.

BOT 101 General Botany Lecture (3)

3 hours lecture

Note: Not open to students with prior credit in BOT 100

Transfer acceptability: CSU; UC – BOT 100 and 101/101L combined: maximum credit, 4 units

The diversity, structure, and function of major plant groups including cellular metabolism, soil-water relationships, classification, genetics, life cycle patterns, growth, and the basic ecological and evolutionary concepts of botany.

BOT 101L General Botany Laboratory (1)

3 hours laboratory

Prerequisite: Completion of, or concurrent enrollment in, BOT 101

Note: Not open to students with prior credit in BOT 100

Transfer acceptability: CSU; UC – BOT 100 and 101/101L combined: maximum credit, 4 units

A laboratory course in plant biology. Special emphasis on the structure, growth, function, genetics, and life cycles of major plant groups. This is a general education course intended for non-science majors.

BOT 110 Botany of Spring Wildflowers (4)

3 hours lecture-3 hours laboratory

Transfer acceptability: CSU; UC

The identification, distribution, and interrelationships of plants in their natural environment; ecological principles; and representative plant communities. Special emphasis will be given to the study of plant families and the use of taxonomic keys.

BOT 115 Plants and People (3)

3 hours lecture

Transfer acceptability: CSU; UC – No credit if taken after 100 or 101/101L

The role of plants in the world ecosystem, including past and present cultural and economic uses for food, medicine, and industrial products. Principles of plant structure and function, with selected topics on plant diversity, plant adaptations, and the interrelationships between plants and people will also be discussed.

BOT 195 Field Study of Native Plants (1,2,3)

2, 4 or 6 hours lecture/laboratory

Note: May be taken 4 times

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

Extended field study of the flora of selected geographical areas including habitats, adaptations, and identification of native and naturalized species. See *Class Schedule* for locality to be visited. Fee charged.

BOT 197 Botany 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 Botany. See *Class Schedule* for specific topic offered. Course title will designate subject covered.

Business Education (BUS)

See also Accounting, Business Management, International Business, Legal Studies, Office Information Systems, Paralegal Studies, Real Estate

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.

PROGRAMS OF STUDY

Advertising, Marketing, and Merchandising

This program is designed to provide a general academic background of coursework pertinent to entry-level employment and/or upper division education in the field of product or service distribution.

A.A. Degree Major or Certificate of Achievement

Program Requirements	Units
ACCT 103 and Financial Accounting	
ACCT 104 or Accounting Electronic Spreadsheet Lab	
BUS 105 Bookkeeping Fundamentals	3,5
BUS 110 Business Mathematics	3
BUS 115 Business Law	3
BUS 140 Selling for Business	3
BUS 145/	
FASH 125 Retailing/Promotion	3
BUS 150 Advertising	3
BUS 155 Marketing	3
Electives (Select 10-11 units)	
BUS 100 Introduction to Business	3
BUS 125 Business English	3
BUS 136 Personal Finance	3
BUS 157 E-Commerce	3
BUS 158 Marketing Internship	3
BUS 170 Word Processing for Business - Basic	1
BUS 205 Business Writing	3
BMGT 110 Human Resource Management	3
BMGT 105 Small Business Management	3
CSIS 105 or Computer Concepts/Microcomputer Applications	
CSIS/	
RCSIS 120 Microcomputer Applications	3
MATH 120 Elementary Statistics	3
OIS 101 Beginning Keyboarding	3
SPCH 100 Oral Communication	3
TOTAL UNITS	31 - 34

Recommended Elective: BUS 171

Business Administration

Provides a program to prepare the student for transfer. Since requirements vary at each four-year school, transfer students must consult with a counselor, or a Business Education Department advisor, to develop a program for the specific school they wish to attend.

A.A. Degree Major

Program Requirements	Units
ACCT 103 Financial Accounting	4
ACCT 104 Accounting Electronic Spreadsheet Lab	1
ACCT 108 Managerial Accounting	4
BUS 115 or Business Law	
BUS 117 Legal Environment of Business3	
BUS 175 Excel for Business	1
BUS 205 Business Writing	3
CSIS 105 or Computer Concepts/Microcomputer Applications	
CSIS/	
RCSIS 120 Microcomputer Applications	3
ECON 100 or Basic Economics	

ECON 101 and Principles of Economics (Macro)	
ECON 102 Principles of Economics (Micro)	3,6
MATH 120 Elementary Statistics	3
MATH 130 Calculus for the Social Sciences	4
TOTAL UNITS	29 - 32

Business - General

This program is primarily designed for students who are seeking an overview of business educational opportunities prior to a career commitment in a particular area.

A.A. Degree Major

Program Requirements	Units
ACCT 103 and Financial Accounting	
ACCT 104 or Accounting Electronic Spreadsheet Lab	
BUS 105 Bookkeeping Fundamentals	3,5
BUS 100 Introduction to Business	3
BUS 110 Business Mathematics	3
BUS 115 Business Law	3
BUS 125 Business English	3
BUS 155 Marketing	3
BMGT 101 or Introduction to Management	
BMGT 105 Small Business Management	3
CSIS 105 or Computer Concepts/Microcomputer Applications	
CSIS/	
RCSIS 120 Microcomputer Applications	3
Electives (Select 6-9 units)	
ACCT 108 Managerial Accounting	4
ACCT 115 Sales Tax, Payroll Taxes, and Employee Benefits	2
BUS 116 Business Law	3
BUS 130 Intro Purchasing and Supply Chain Management	3
BUS 140 Selling for Business	3
BUS 145/	
FASH 125 Retailing/Promotion	3
BUS 150 Advertising	3
BUS 157 E-Commerce	3
BUS 158 Marketing Internship	3
BUS 205 Business Writing	3
OIS 101* or Beginning Keyboarding	
OIS 102 Intermediate Keyboarding	3
TOTAL UNITS	30 - 35

* Not required if acceptable level skill has been completed in high school. Students excused from OIS 101 must substitute an elective.

Recommended Electives: BUS 170, 171; PSYC 100; ECON 101

Call Center Representative

Provides a program to prepare the student for an entry-level position in a call services center.

Certificate of Proficiency

Program Requirements	Units
CSIS/	
RCSIS 170 Windows	1
BUS 122 Call Center Services	3
BUS 125 Business English	3
BUS 140 Selling for Business	3
TOTAL UNITS	10

E-Business

Provides a program, which prepares students in the basic skills necessary to use e-commerce in an ever changing and competitive entrepreneurial market.

Certificate of Proficiency

Program Requirements	Units
BMGT 105 Small Business Management	3
BUS 155 Marketing	3
BUS 157 E-Commerce	3
GC 217 Online Store Design I	3

Electives (Select 3 units)

BUS 138	Business Ethics	2
BUS 142	Customer Service	1
BUS 180	Access for Business	1
BUS 190	Internet for Business	1
GC 218	Online Store Design II	3
GC 290	Copyright Graphic Designers/Web Developers	1
GC 291	Contracts Graphic Designers/Web Developers	1
GC 292	Legal Issues Graphic Designers/Web Developers	3
TOTAL UNITS		15

Entrepreneurship

Provides a program to prepare the student for owning and managing a business.

Certificate of Proficiency

Program Requirements		Units
BMGT 105	Small Business Management	3
BUS 105	Bookkeeping Fundamentals	3
BUS 155	Marketing	3
BUS 157	E-Commerce	3
BUS 170	Word Processing for Business - Basic	1
BUS 175	Excel for Business	1

Electives (Select 3 units)

BUS 138	Business Ethics	2
BUS 142	Customer Service	1
BUS 171	Word Processing for Business - Advanced	1
BUS 180	Access for Business	1
BUS 185	PowerPoint for Business	1
BUS 190	Internet for Business	1
TOTAL UNITS		17

Internet

The Internet program is also offered in Graphic Communications.

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 proveniences:

- 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.

A.A. Degree Major or Certificate of Achievement

Program Requirements		Units
BUS 157	E-Commerce	3
CSIS/		
RCSIS 137	Web Site Development with HTML	2

GC/		
RGC 202 or	Web Page Layout I	3
GC 230 and	Web Page Layout I – Part I	1.5
GC 231	Web Page Layout I – Part II	1.5
LT 154	Information for Life Long Learning	3
Emphasis Requirements		14–18
TOTAL UNITS		25-29

Emphasis in Business Education

Emphasis Requirements		Units
BMGT 105	Small Business Management	3
BUS 140	Selling for Business	3
BUS 150	Advertising	3
BUS 155	Marketing	3
BUS 170	Word Processing for Business – Basic	1
BUS 171	Word Processing for Business - Advanced	1

Emphasis in Graphic Communication

Emphasis Requirements		Units
GC 144	Web Graphics	3
GC/RGC 203	Interactive Publishing with PDF's	3
GC 206	Web Multimedia	3
GC 212	Web Page Layout II	3
GC 215	Designing for Web Standards I	
GC 217 or	Online Store Design I	
GC 229	Interactive Streaming Media	3

Retail Management

A comprehensive program designed to prepare current and future retail employees for the fast paced challenges in a competitive retail environment. This certificate has been endorsed by the Western Association of Food Chains and its member companies.

Certificate of Achievement

Program Requirements		Units
ACCT 103	Financial Accounting	4
ACCT 104	Acct Electronic Spreadsheet Lab	1
BMGT 101	Introduction to Management	3
BMGT 110	Human Resource Management	3
BUS 110	Business Mathematics	3
BUS 145/		
FASH 125	Retailing/Promotion	3
BUS 155	Marketing	3
BUS 205	Business Writing	3
OIS 120	Intro to Office Info Systems	3
SPCH 115	Interpersonal Communication	3
TOTAL UNITS		29

Salesperson - Retail

This program is designed to prepare students for entry into the retail sales force. Students will gain a working knowledge of sales techniques and customer service principles within the marketing environment. Emphasis will be placed on a consultative approach toward encouraging sales.

Certificate of Proficiency

Program Requirements		Units
(Select 3 classes totaling 9 units)		
BUS 140	Selling for Business	3
BUS 145/		
FASH 125	Retailing/Promotion	3
BUS 150	Advertising	3
BUS 155	Marketing	3

Elective Courses (Select 6 units)

BUS 100	Introduction to Business	3
BUS 110	Business Mathematics	3
BUS 138	Business Ethics	2
BUS 142	Customer Service	1
TOTAL UNITS		15

COURSE OFFERINGS

BUS 100 Introduction to Business (3)

3 hours lecture

Transfer acceptability: CSU; UC

Preparation for survival within the global economy. Topics such as small business management, managerial theory, international business, and marketing represent several important class components. Includes strong career guidance component.

BUS 105 Bookkeeping Fundamentals (3)

3 hours lecture

Note: Not open to students who have completed ACCT 103**Transfer acceptability:** CSU;

Comprehensive coverage of the basic bookkeeping cycle, including journalizing, posting, worksheet and financial statements; payroll records; petty cash systems; reconciliation of bank statements. Designed to give practical preparation for bookkeeping positions.

BUS 110 Business Mathematics (3)

3 hours lecture

Transfer acceptability: CSU

Theory and practical application to business situations of computing trade and cash discounts, commissions, payrolls, property taxes, interest, bank discount, compound interest, present value, annuities, sinking funds, insurance, consumer credit, and depreciation.

BUS 115 Business Law (3)

3 hours lecture

Transfer acceptability: CSU; UC – BUS 115, 116, 117 combined: maximum credit, one course; CAN BUS 8

Law in its relationships to business contracts, agency, bailment, and sales.

BUS 116 Business Law (3)

3 hours lecture

Recommended preparation: A minimum grade of "C" in BUS 115**Transfer acceptability:** CSU; UC – BUS 115, 116, 117 combined: maximum credit, one course

Law in its relationships to negotiable instruments, partnerships, corporations, real property, insurance, wills and estates, and bankruptcy.

BUS 117 Legal Environment of Business (3)

3 hours lecture

Transfer acceptability: CSU; UC – BUS 115, 116, 117 combined: maximum credit, one course; CAN BUS 12

Business legal systems, sources of law, social and ethical influences, judicial and administrative systems, contracts, torts, bankruptcy, agency, business organizations, securities regulation, regulation of property, and protection of intellectual property interests.

BUS 122 Call Center Services (3)

3 hours lecture

Preparation for employment in a call center telemarketing environment. Includes purpose and effectiveness of a call center; technologies used; ergonomics; professional procedures; customer service and customer psychology; and interpersonal and telecommunication skills.

BUS 125 Business English (3)

3 hours lecture

Transfer acceptability: CSU

Practical approaches to solving the common problems of English language usage, as specifically applied to business-oriented written material. Coverage includes business vocabulary, spelling, grammar, idioms, sentence structure, and punctuation.

BUS 130 Introduction to Purchasing and Supply Chain Management (3)

3 hours lecture

Transfer acceptability: CSU

Basic principles in purchasing and supply chain management, relationship management, application of processes, inventory management, source selection, obtaining and evaluating offers, buying techniques, contract writing and legal aspects.

BUS 136 Personal Finance (3)

3 hours lecture

Note: Cross listed as FCS 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.

BUS 138 Business Ethics (2)

2 hours lecture

Transfer acceptability: CSU

This course provides a systems approach for making business decisions that are responsible, practical, and defensible. It examines the gray zone of ethical quandaries and provides a methodical process for selecting alternative solutions that are ethical and good for business.

BUS 140 Selling for Business (3)

3 hours lecture

Transfer acceptability: CSU

A study of the working principles of selling in a business environment including prospecting for customers, understanding buying behavior, developing a sales presentation, closing the sale while delivering the best customer service, and maintaining professional relationships.

BUS 142 Customer Service (1)

1 hour lecture

Transfer acceptability: CSU

This course covers the entire spectrum of customer service, which includes anything a business does for a customer in order to enhance the customer experience. Central focus of the course is recognition that it is much more costly to attract new customers than it is to maintain current customers.

BUS 145 Retailing/Promotion (3)

3 hours lecture

Note: Cross listed as FASH 125**Transfer acceptability:** 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.

BUS 150 Advertising (3)

3 hours lecture

Transfer acceptability: CSU

A study of advertising media and methods as sales promotional tools in marketing activities including, but not limited to, such areas as the production and evaluation of advertisements and advertising media.

BUS 155 Marketing (3)

3 hours lecture

Transfer acceptability: CSU

A study of the role and functions of marketing in the wholesale and retail distribution of industrial and consumer goods and services, to familiarize students with marketing policies and practices, integration of marketing activities, and pertinent government regulations.

BUS 157 E-Commerce (3)

3 hours lecture

Recommended preparation: BUS 190**Transfer acceptability:** CSU

Addresses the methods by which a business can harness the powers of the Web to sell its product. Examines planning an e-business, web site creation and hosting, e-commerce stores, electronic payment issues and security, marketing an e-business, copyright, and privacy policy issues.

BUS 158 Marketing Internship (3)

3 hours lecture

Note: Course not offered every semester**Transfer acceptability:** CSU

A group process whereby students form their own promotions company. Students will work with a local business owner for the purpose of creating and implementing a promotional event to be held on campus, at the client's place of business, or at another

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BUS 205 Business Writing**(3)***3 hours lecture***Prerequisite:** A minimum grade of "C" in BUS 125 or eligibility determined through the Business English placement process**Recommended preparation:** ENG 100**Transfer acceptability:** CSU

Principles of effective writing applied to business communications. Develops skill in analysis, organization, composition, and presentation of various types of letters, memos, and reports to elicit the desired responses. Formal analytical report required.

Business Management (BMGT)

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.

PROGRAMS OF STUDY

Business Management

This program includes a selection of courses that provides academic preparation to individuals who are seeking employment, or are currently employed, within the management structure of business.

A.A. Degree Major or Certificate of Achievement

Program Requirements

Core Courses (Select 18-20 units)

ACCT 103 and	Financial Accounting	
ACCT 104 or	Acct Electronic Spreadsheet Lab	
BUS 105	Bookkeeping Fundamentals	3, 5
BUS 100	Introduction to Business	3
BUS 110	Business Mathematics	3
BUS 115	Business Law	3
BUS 155	Marketing	3
BUS 205	Business Writing	3
CSIS 105 or	Computer Concepts/Microcomputer	
CSIS/		
RCSIS 120	Microcomputer Applications	3
ECON 100 or	Basic Economics	
ECON 101 or	Principles of Economics (Macro)	
BUS 136	Personal Finance	3
MATH 120	Elementary Statistics	3
PSYC 100	Introduction to Psychology	3
SPCH 100	Oral Communication	3

Management Courses (Select 8-9 units)

BMGT 101	Introduction to Management	3
BMGT 105	Small Business Management	3
BMGT 110	Human Resource Management	3
BMGT 115	Organizational Theory and Design	3
BMGT 125	Introduction to Labor Relations	3
BMGT 130	Management/Leadership Issues	3
BMGT 197	Business Management Topics	.5-4

Elective Courses (Select 3-4 units)

ACCT 108	Managerial Accounting	4
BUS 130	Intro Purchase/Supply Chain Management	3
BUS 140	Selling for Business	3
BUS 145/		
FASH 125	Retailing/Promotion	3
BUS 157	E-Commerce	3
BUS 158	Marketing Internship	3
BUS 170	Word Processing for Business - Basic	1
BUS 171	Word Processing for Business - Advanced	1
BUS 187	Project for Business	
1		
BUS 197	Business Topics	.5-4
RE 100	Real Estate Principles	3
CE 100	Cooperative Education	1,2,3,4

TOTAL UNITS**29 – 33**

COURSE OFFERINGS

BMGT 101 Introduction to Management

(3)*3 hours lecture***Transfer acceptability:** CSU

A leadership course designed to enhance understanding of responsibilities associated with management in business. Topics will cover management styles and human behavior factors associated with managing staff.

BMGT 105 Small Business Management

(3)*3 hours lecture***Transfer acceptability:** CSU

For owners and managers of small businesses. Analysis of personal qualifications, forms of ownership, sources of information, financing, planning, legal problems, record keeping, advertising, insurance, sales promotions, credit, public relations, and current aids to successful management.

BMGT 110 Human Resource Management

(3)*3 hours lecture***Transfer acceptability:** CSU

A survey of the history and present status of human resource management in the United States. Emphasis on modern techniques of recruitment, placement, wage administration, communications, training, labor relations, and employer-employee relationships in modern industry and business.

BMGT 115 Organizational Theory and Design

(3)*3 hours lecture***Transfer acceptability:** CSU

Policies and methods of organization in business enterprises of various types and sizes. Functional components of business organization: planning, controlling, coordinating, and directing to meet organizational objectives. Establishing lines of authority and functions of departments or units with emphasis on systems management.

BMGT 125 Introduction to Labor Relations

(3)*3 hours lecture***Transfer acceptability:** CSU

Introduction to, and development of, an appreciation for labor relations; review of procedures involved in negotiation and administration of labor agreements; development of an understanding of the involvement of labor and management in a collective bargaining agreement; and an overview of the general nature of the labor-management relationship and labor law as they currently exist in the United States.

BMGT 130 Management/Leadership Issues

(3)*3 hours lecture***Transfer acceptability:** CSU

Examination of current issues in management and leadership including: organizing, staffing, decision making, motivating, communicating, and applying such skills to a business organization. Concepts related to group dynamics, change, conflict, organizational communications, and productivity are explored.

BMGT 197 Business Management 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 Business Management. See Class Schedule for specific topic offered. Course title will designate subject covered.

Cabinet and Furniture Technology (CFT)

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

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

Cabinetmaking and Furniture Design

Provides the student with the theory and skills needed for employment in the field of cabinetmaking and furniture design.

A.A. Degree Major or Certificate of Achievement

Program Requirements	Units
CFT 100 Fundamentals of Woodworking	2,3,4
CFT 105 Machine Woodworking/Furniture	2,3,4
CFT 110 Machine Tool Joinery I	2,3,4
CFT 111 Machine Tool Joinery II	2,3,4
CFT 153 Studio Furniture Design I	2,3,4
CFT 165 Cabinet/Face Frame Construction	2,3,4
CFT 167 Cabinetmkg/32mm European Construction	2,3,4
CFT 195 Finishing Tech/Touch-Up/Repair	2,3,4

Group One (Select 12 units)

CFT 149 Hand Joinery I	2,3,4
CFT 150 Hand Joinery II	2,3,4
CFT 151 Veneering Technology I	2,3,4
CFT 152 Veneering Technology II	2,3,4
CFT 155 Classic American Chair Designs	2,3,4
CFT 157 Chair/Seating Prototype Construction	2,3,4
CFT 158 Chair/Seating Production Manufacturing	2,3,4
CFT 161 Tables/Prototype Construction	2,3,4
CFT 162 Tables/Production Manufacturing	2,3,4

Group Two (Select 12 units)

CFT 120 Advanced Furniture Lab	.5-3
CFT 130 Stringed Instrument Making	2,3,4
CFT 141 Making Woodworking Tools	.5,1,2,3
CFT 142 The Art and Craft of Planemaking	.5,1,2,3
CFT 143 Decorative Box Making	2,3,4
CFT 144 Production Furniture Making (Toys)	.5,1
CFT 154 Studio Furniture Design II	2,3,4
CFT 156 Advanced Classic American Chair Design	2,3,4
CFT 163 Laminate Fabrication	.5,1
CFT 164 Cabinet Installation	.5,1
CFT 166 Cabinetmaking/Production & Manufacturing	2,3,4
CFT 168 Cabinetmaking/Architectural Millwork	2,3,4
CFT 169 Cabinetmaking/Computer Cabinet Layout	.5,1,2,3
CFT 170 Workbench Design and Production	2,3,4
CFT 171 Furniture for the Wood Shop	2,3,4
CFT 172 Turbo CAD for Cabinets and Furniture	2,3,4
CFT 175 Jigs and Fixtures	2,3,4
CFT 180 Wood Bending And Lamination	2,3,4
CFT 185 Machine Tool Set-Up and Maintenance	2,3,4
CFT 186 Machine Tool/Production Carving	1,2,3,4
CFT 187 Introduction to Carving	1,2,3,4
CFT 188 Intermediate Carving	1,2,3,4
CFT 189 Advanced Carving	1,2,3,4
CFT 190 Specialty and Manufactured Hardware	.5,1,2,3
CFT 196 Special Problems in CFT	1-6
CFT 197 Cabinet and Furniture Technology Topics	.5-4
CFT 198 Advanced Wood Finishing	2,3,4
CFT 295 Directed Study in Woodworking	1,2,3,4,5,6

TOTAL UNITS 40 – 56

Cabinetmaking and Millwork

Provides the student with the theory and skills needed for employment in the cabinet and millwork industry.

A.A. Degree Major or Certificate of Achievement

Program Requirements	Units
CFT 100 Fundamentals of Woodworking	2,3,4
CFT 105 Machine Woodworking/Furniture	2,3,4
CFT 165 Cabinet/Face Frame Construction	2,3,4
CFT 167 Cabinetmkg/32mm European Const	2,3,4
CFT 168 Cabinetmaking/Architectural Millwork	2,3,4
CFT 195 Finishing Tech/Touch-Up/Repair	2,3,4

Group One (Select 12 units)

CFT 110 Machine Tool Joinery I	2,3,4
CFT 111 Machine Tool Joinery II	2,3,4
CFT 151 Veneering Technology I	2,3,4
CFT 152 Veneering Technology II	2,3,4
CFT 153 Studio Furniture Design I	2,3,4
CFT 166 Cabinetmaking/Production & Manufacturing	2,3,4
CFT 169 Cabinetmaking/Computer Cabinet Layout	.5,1,2,3
CFT 185 Machine Tool Set-up and Maintenance	2,3,4

Group Two (Select 12 units)

CFT 97 Cabinet and Furniture Technology Topics	.5-4
CFT 120 Advanced Furniture Lab	.5-3
CFT 142 The Art and Craft of Planemaking	.5,1,2,3
CFT 143 Decorative Box Making	2,3,4
CFT 149 Hand Joinery I	2,3,4
CFT 150 Hand Joinery II	2,3,4
CFT 154 Studio Furniture Design II	2,3,4
CFT 155 Classic American Chair Designs	2,3,4
CFT 156 Adv Classic American Chair Design	2,3,4
CFT 157 Chair/Seating Prototype Construction	2,3,4
CFT 158 Chair/Seating Production Manufacturing	2,3,4
CFT 161 Tables/Prototype Construction	2,3,4
CFT 162 Tables/Production Manufacturing	2,3,4
CFT 163 Laminate Fabrication	.5,1
CFT 164 Cabinet Installation	.5,1
CFT 170 Workbench Design and Production	2,3,4
CFT 171 Furniture for the Wood Shop	2,3,4
CFT 172 Turbo CAD for Cabinets and Furniture	2,3,4
CFT 175 Jigs and Fixtures	2,3,4
CFT 180 Wood Bending And Lamination	2,3,4
CFT 186 Machine Tool/Production Carving	1,2,3,4
CFT 187 Introduction to Carving	1,2,3,4
CFT 188 Intermediate Carving	1,2,3,4
CFT 189 Advanced Carving	1,2,3,4
CFT 190 Specialty and Manufactured Hardware	.5,1,2,3
CFT 196 Special Problems in CFT	1-6
CFT 197 Cabinet and Furniture Technology Topics	.5-4
CFT 198 Advanced Wood Finishing	2,3,4
CFT 295 Directed Study in Woodworking	1,2,3,4,5,6

TOTAL UNITS 36 - 48

Furniture Making

Provides the student with the theory and skills needed for employment in the field of furniture production and manufacturing.

A.A. Degree Major or Certificate of Achievement

Program Requirements	Units
CFT 100 Fundamentals of Woodworking	2,3,4
CFT 105 Machine Woodworking/Furniture	2,3,4
CFT 110 Machine Tool Joinery I	2,3,4
CFT 111 Machine Tool Joinery II	2,3,4
CFT 151 Veneering Technology I	2,3,4
CFT 152 Veneering Technology II	2,3,4
CFT 153 Studio Furniture Design I	2,3,4
CFT 154 Studio Furniture Design II	2,3,4
CFT 157 or Chair/Seating Prototype Construction	
CFT 161 Tables/Prototype Construction	2,3,4
CFT 195 Finishing Tech/Touch-Up/Repair	2,3,4

Group One (Select 5-6 units)

CFT 149 Hand Joinery I	2,3,4
CFT 150 Hand Joinery II	2,3,4

CFT 155	Classic American Chair Designs	2,3,4
CFT 180	Wood Bending And Lamination	2,3,4
CFT 187	Introduction to Carving	1,2,3,4
CFT 188	Intermediate Carving	1,2,3,4

Group Two (Select 5-6 units)

CFT 97	Cabinet and Furniture Technology Topics	.5-4
CFT 120	Advanced Furniture Lab	.5-3
CFT 130	Stringed Instrument Making	2,3,4
CFT 141	Making Woodworking Tools	.5,1,2,3
CFT 142	The Art and Craft of Planemaking	.5,1,2,3
CFT 143	Decorative Box Making	2,3,4
CFT 144	Production Furniture Making (Toys)	.5,1
CFT 156	Advanced Classic American Chair Design	2,3,4
CFT 158	Chair/Seating Production Manufacturing	2,3,4
CFT 162	Tables/Production Manufacturing	2,3,4
CFT 165	Cabinet/Face Frame Construction	2,3,4
CFT 166	Cabinetmaking/Production & Manufacturing	2,3,4
CFT 167	Cabinetmaking/32mm European Construction	2,3,4
CFT 168	Cabinetmaking/Architectural Millwork	2,3,4
CFT 169	Cabinetmaking/Computer Cabinet Layout	.5,1,2,3
CFT 170	Workbench Design and Production	2,3,4
CFT 171	Furniture for the Wood Shop	2,3,4
CFT 172	Turbo CAD for Cabinets and Furniture	2,3,4
CFT 175	Jigs and Fixtures	2,3,4
CFT 185	Machine Tool Set-Up and Maintenance	2,3,4
CFT 186	Machine Tool/Production Carving	1,2,3,4
CFT 189	Advanced Carving	1,2,3,4
CFT 190	Specialty and Manufactured Hardware	.5,1,2,3
CFT 196	Special Problems in CFT	1-6
CFT 197	Cabinet and Furniture Technology Topics	.5-4
CFT 198	Advanced Wood Finishing	2,3,4
CFT 295	Directed Study in Woodworking	1,2,3,4,5,6
TOTAL UNITS		30 – 52

COURSE OFFERINGS

Courses numbered under 100 are not intended for transfer credit.

CFT 70 Drawing for the Construction/Cabinet/ Millwork Trades (3)

2 hours lecture-3 hours laboratory

Note: Cross listed as DT 70

Planning, drawing, interpreting, estimating construction, and cabinet work and millwork drawing.

CFT 97 Cabinet and Furniture 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 Cabinet and Furniture Technology. See Class Schedule for specific topic covered. Course title will designate subject covered.

CFT 100 Fundamentals of Woodworking (2,3,4)

4, 6, or 8 hours lecture/laboratory

Transfer acceptability: CSU

An introductory course in design and construction of wood products. Survey, use, care and selection of woodworking machines and hand tools. Explanation of the basic techniques of milling, joinery, assembly, and finishing.

CFT 105 Machine Woodworking/Furniture (2,3,4)

4, 6, or 8 hours lecture/laboratory

Prerequisite: CFT 100

Note: May be taken 2 times

Study, design, and development of practical applications for basic cabinet construction as utilized by the wood products industry. Includes partitions, face frame, carcass, and basic door and drawer construction. Operation of woodworking machines, tools and processes, techniques, and care and suitability of tools and machines.

CFT 110 Machine Tool Joinery I (2,3,4)

4, 6, or 8 hours lecture/laboratory

Prerequisite: CFT 105

Note: May be taken 3 times; maximum of 4 completions in any combination of CFT 110, CFT 111

Through the construction of a specific furniture project, students will advance to a sophisticated level of joinery and design-utilizing mortise and tenon, dovetails, frame and panel, and other joinery appropriate to fine furniture. With the addition of advanced machinery training, students will be able to develop and build a custom design of their choice, creating heirloom furniture in either traditional or contemporary styling.

CFT 111 Machine Tool Joinery II (2,3,4)

4, 6, or 8 hours lecture/laboratory

Prerequisite: CFT 110

Note: May be taken 3 times; maximum of 4 completions in any combination of CFT 110, CFT 111

Completion of student built cabinet furniture project that incorporated solid wood and traditional joinery in its design. Students will explore door and drawer construction methods, furniture hardware, and various finishing choices. Creation of special moldings and spindle turnings for decorating the carcass will also be explored.

CFT 120 Advanced Furniture Lab (.5-3)

1 ½ - 9 hours laboratory

Prerequisite: CFT 100

Note: May be taken 4 times

Laboratory for students who need additional lab time to complete difficult, complex projects. Students will work under the supervision of an instructor.

CFT 130 Stringed Instrument Making (2,3,4)

4, 6, or 8 hours lecture/laboratory

Prerequisite: CFT 100

Note: May be taken 4 times

Through the fabrication of a steel stringed guitar, students will study the: history, tone theory, construction processes, materials, finishing and set up of stringed instruments. Students will work together, production style, milling raw lumber from local sources into guitar part blanks. Students will then work individually constructing their own guitar. Traditional and modern methods of construction and fabrication are explored.

CFT 141 Making Woodworking Tools (.5,1,2,3)

1, 2, 4, or 6 hours lecture/laboratory

Note: May be taken 4 times

Making traditional woodworking tools used to make furniture and chairs. Topics include the history and uses of tools, materials and design, layout of the stock, equipment needed to make and finish the tools, sharpening and fitting the blades, forging and heat treating steel parts. Types of tools include spoke shaves, shaving horses, steaming devices and bending forms.

CFT 142 The Art and Craft of Planemaking (.5,1,2,3)

1, 2, 4, or 6 hours lecture/laboratory

Prerequisite: CFT 100

Note: May be taken 3 times

This course will teach students to make wooden hand planes. Through the use of lecture, handouts, demonstrations and videos, the following topics will be covered: the history of planemaking; tuning and using wooden and metal planes; designing a plane; making and tuning laminated planes; cutting, tempering and sharpening a plane iron; designing, making and using a wooden plane.

CFT 143 Decorative Box Making (2,3,4)

4, 6, or 8 hours lecture/laboratory

Prerequisite: CFT 105

Note: May be taken 2 times

Concentrates on the skills and techniques needed to make finely crafted heirloom quality boxes. Types of boxes include: jewelry, cigar humidor, and silver chest. Topics include: design, function, selection of materials, construction techniques, partitions, linings, hardware, assembly techniques, hinge installation, and finishing techniques.

CFT 144 Production Furniture Making (Toys) (.5-1)*1 to 2 hours lecture/laboratory***Note:** May be taken 2 times

Methods and techniques of manufacturing production are learned through lecture and demonstration. Skills are acquired as these methods and techniques are applied in extensive lab work in a production mode. To enable the production of relatively large quantities with varied complexity, this course utilizes the manufacture of quality wooden toys, which are donated to local charities.

CFT 149 Hand Joinery I (2,3,4)*4, 6, or 8 hours lecture/laboratory***Prerequisite:** CFT 105**Note:** May be taken 2 times

Exploration of hand tool techniques with application to fine furniture. Skills will be developed through the construction of sample joints and a simple project. Topics include: marking and layout tools, cutting tools, use of the workbench and its accessories, hand saws and their use, Japanese vs. Western tools, dovetail joinery, mortise and tenon joinery, squaring and sizing with a hand plane, sharpening hand tools and building a simple carcass.

CFT 150 Hand Joinery II (2,3,4)*4, 6, or 8 hours lecture/laboratory***Prerequisite:** CFT 149**Note:** May be taken 2 times

Comprehensive study of specialized woodworking techniques. The emphasis of this course will be on the development of hand tool skills. Learning exercises will be completed making traditional joinery typical of fine furniture.

CFT 151 Veneering Technology I (2,3,4)*4, 6, or 8 hours lecture/laboratory***Prerequisite:** CFT 105**Note:** May be taken 2 times

Introduction to the use of veneers in furniture making. Topics include: understanding veneer as a material, cutting and seaming veneer, pressing veneer using traditional and modern methods, creating sunbursts and other multi-piece matches, using and maintaining various cutting tools and sawing your own veneer.

CFT 152 Veneering Technology II (2,3,4)*4, 6, or 8 hours lecture/laboratory***Prerequisite:** CFT 151**Note:** May be taken 2 times

Study and practice of advanced veneering techniques which includes working with radius shapes, hand and machine marquetry techniques, hammer veneering, and installation of bandings and stringings. Students will demonstrate their abilities in the construction of a small piece of furniture.

CFT 153 Studio Furniture Design I (2,3,4)*4, 6, or 8 hours lecture/laboratory***Prerequisite:** CFT 105**Note:** May be taken 2 times

Exploration of historical design concepts and their application to contemporary work. Development of drawing skills needed to design one of a kind studio furniture.

CFT 154 Studio Furniture Design II (2,3,4)*4, 6, or 8 hours lecture/laboratory***Prerequisite:** CFT 153**Note:** May be taken 2 times

Implementation of students' design concepts created in CFT 153. Exploration of market opportunities and client relationships.

CFT 155 Classic American Chair Designs (2,3,4)*4, 6, or 8 hours lecture/laboratory***Note:** May be taken 4 times; maximum of 4 completions in any combination of CFT 155, CFT 156

Chair making which emphasizes the use of traditional chair making tools to shape raw wood into chair parts. Topics include the history of Windsor and Ladder Back chair designs; harvesting raw materials from a tree; proper sharpening of the hand tools; shaping, steam bending, kiln drying and assembling the chair parts; seat weaving; and traditional finishing appropriate to each chair style.

CFT 156 Advanced Classic American Chair Designs (2,3,4)*4, 6, or 8 hours lecture/laboratory***Prerequisite:** CFT 155**Note:** May be taken 4 times; maximum of 4 completions in any combination of CFT 155, CFT 156

Chair making which emphasizes the use of traditional chair making tools to shape raw wood into chair parts. Skill development and improved craftsmanship is emphasized while learning to make more complex chairs. Advanced chair designs include: bow back, continuous arm, writing arm, double and triple settees and fan back Windsor chairs; Appalachian style three-slat side chair, four-slat arm chair, bar stools, youth rocker and six-slat rocking chair.

CFT 157 Chair and Seating/Prototype Construction (2,3,4)*4, 6, or 8 hours lecture/laboratory***Prerequisite:** CFT 105**Note:** May be taken 3 times

In-depth study of production chair making. History of chair making and seating. Design and application of pattern making techniques on student-selected projects.

CFT 158 Chair and Seating/Production Manufacturing (2,3,4)*4, 6, or 8 hours lecture/laboratory***Prerequisite:** CFT 157**Note:** May be taken 3 times

Chair and seating construction; production and advanced machine tool techniques as they relate to chair making. Fine joinery, theory, and advanced techniques.

CFT 161 Tables/Prototype Construction (2,3,4)*4, 6, or 8 hours lecture/laboratory***Prerequisite:** CFT 105**Note:** May be taken 3 times

Table design and construction. Machine tool operations necessary to produce various table leg, trussel, and base designs.

CFT 162 Tables/Production Manufacturing (2,3,4)*4, 6, or 8 hours lecture/laboratory***Prerequisite:** CFT 161**Note:** May be taken 3 times

Development and refinement of table making skills, processes, and procedures. Construction of extension and drop-leaf style tables. Joinery and hardware unique to table making.

CFT 163 Plastic Laminate Fabrication Techniques (.5,1)*1 or 2 hours lecture/laboratory***Note:** May be taken 2 times

This course examines the manufacturing process for plastic laminate products, including tools, adhesives, jigs, application and installation techniques. Lectures, demonstrations, and hands-on exercises will give students the opportunity to develop the proficiency and knowledge to design, build and install plastic laminate products.

CFT 164 Cabinet Installation (.5,1)*1 or 2 hours lecture/ laboratory***Note:** May be taken 2 times

Installation of both face frame and European (32mm) cabinetry. Topics include: Understanding wall structure, measuring and planning for installation, review of cabinet construction with emphasis on installation, in-depth discussion of the tools, jigs, and techniques used for installation, installation of lower face frame cabinets, installation of upper European (32mm) cabinets, finished scribing of molding.

CFT 165 Cabinetmaking/Face Frame/Construction (2,3,4)*4, 6, or 8 hours lecture/laboratory***Prerequisite:** CFT 105**Note:** May be taken 3 times

Traditional face frame cabinet construction as applied in kitchens and bathrooms with design, layout, and material analysis. Hands-on experience in carcass construction, face frames, partitions, and construction of doors and drawers.

CFT 166 Cabinetmaking/Production and Manufacturing (2,3,4)

4, 6, or 8 hours lecture/laboratory

Prerequisite: CFT 165**Note:** May be taken 3 times

Designed to give students the knowledge and ability to enter the cabinetmaking business. Manufacturing and production techniques will be examined along with design, assembly, and installation. Students will learn to bid on jobs, estimate materials, provide client satisfaction, and produce quality work on a profitable basis.

CFT 167 Cabinetmaking/32mm European Construction (2,3,4)

4, 6, or 8 hours lecture/laboratory

Prerequisite: CFT 105**Note:** May be taken 3 times

European 32mm production methods as used in cabinetmaking. European design and space utilization; European machinery, hardware, and the latest in European systems. Influence of the 32mm system on the American cabinetmaking industry.

CFT 168 Cabinetmaking/Architectural Millwork (2,3,4)

4, 6, or 8 hours lecture/laboratory

Prerequisite: CFT 105**Note:** May be taken 3 times

Historical and modern architectural millworking techniques used in frame and panel systems, doors, fireplaces, wall systems, staircases, and built-in components. Hands-on experience on student-selected projects may include woodcarving, woodturning, construction of doors and windows and the production/installation of moldings.

CFT 169 Cabinetmaking/Computer Cabinet Layout (.5,1,2,3)

1, 2, 4 or 6 hours lecture/laboratory

Prerequisite: CFT 105**Note:** May be taken 4 times

Selection and application of appropriate software as developed for the cabinet industry. Development of industrial standard cabinet plans and specifications utilizing personal-size computer and software programs.

CFT 170 Workbench Design and Production(2,3,4)

4, 6, or 8 hours lecture/laboratory

Prerequisite: CFT 100**Note:** May be taken 2 times

Design and construction of the most basic of woodworking tools, a workbench. Process rough lumber to maximize yield and minimize waste. Students will be allowed to customize the size of their bench to fit individual requirements within limits. However, mass-production techniques will not be sacrificed. In addition, a broad review of woodworking vises and other bench accessories will be conducted so that students will be able to further customize their own bench.

CFT 171 Furniture for the Wood Shop (2,3,4)

4, 6, or 8 hours lecture/laboratory

Prerequisite: CFT 100**Note:** May be taken 4 times

The individual student will be required to design and construct one or more projects from a broad range of furniture-quality accessories for the woodworking shop such as tool totes, tool boxes, chests and cabinets (both stationary and portable), step stools, saw horses or workbench accessories. Particular attention will be paid to artistic and functional design, utility, material selection and joinery techniques. Skills in spindle turning, marquetry and inlay, compound angle joinery, coopering, and veneering will be developed and employed depending on the project selected.

CFT 172 TurboCAD for Cabinets & Furniture (2,3,4)

4, 6, or 8 hours lecture/laboratory

Note: May be taken 3 times

Introduction to TurboCAD and to basic CAD concepts and their direct application to the design and drawing of custom cabinets and furniture, as an alternative to "pencil & paper" drawing. Topics will include: extensive 2D and 3D drawing, modifying, and

editing tools; the production of measured, shop drawings as an essential first step in the construction of a project; rendering, as a tool in the visualization of concept design.

CFT 175 Jigs and Fixtures (2,3,4)

4, 6, or 8 hours lecture/laboratory

Prerequisite: CFT 105**Note:** May be taken 4 times

Theory of production tooling, fixtures, and jigs; design and develop practical applications of production tooling, fixtures and jigs as used in current machines within the industry. Field trips to local industries will allow students to further understand tooling as used in the trades.

CFT 180 Wood Bending and Lamination/ Wood Technology (2,3,4)

4, 6, or 8 hours lecture/laboratory

Prerequisite: CFT 105**Note:** May be taken 4 times

Principles and practical applications of both wood bending and lamination. Mechanical and chemical means of bending wood studied and developed, specific structure and properties of wood are developed.

CFT 185 Machine Tool Set-up and Maintenance (2,3,4)

4, 6, or 8 hours lecture/laboratory

Prerequisite: CFT 100**Note:** May be taken 4 times

Set up, repair, rebuild, and maintain tools and machines used in the wood-related industries. Machine tool operations studies and applied. Consumer information developed to acquaint student with machines and tools within the field. Planned maintenance schedules developed and applied.

CFT 186 Machine Tool/Production Carving (1,2,3,4)

2, 4, 6, or 8 hours lecture/laboratory

Prerequisite: CFT 105**Note:** May be taken 4 times for a maximum of 9 units

Introductory woodcarving course using hand and power machine tools. Design considerations, carving techniques, production carving, and incorporation of woodcarving into cabinetmaking, furniture construction, and architectural millwork.

CFT 187 Introduction to Carving (1,2,3,4)

2, 4, 6, or 8 hours lecture/laboratory

Note: May be taken 4 times; maximum of 4 completions in any combination of CFT 187, CFT 188, CFT 189

This beginning course in carving introduces students to the tools and techniques used in carving wood. The course includes specifics of available tools, their proper handling and maintenance, as well as discussions of layout and carving methods as applied to furniture and architectural millwork.

CFT 188 Intermediate Carving (1,2,3,4)

2, 4, 6, or 8 hours lecture/laboratory

Prerequisite: CFT 187**Note:** May be taken 4 times; maximum of 4 completions in any combination of CFT 187, CFT 188, CFT 189

This course examines methods relating to both low and high relief carving, as well as incised lettering. More complex layout and carving techniques are undertaken. Concepts such as setting-in and blocking-out are introduced while modeling, introduced in the beginning course, is more fully developed.

CFT 189 Advanced Carving (1,2,3,4)

2, 4, 6, or 8 hours lecture/laboratory

Note: May be taken 4 times; maximum of 4 completions in any combination of CFT 187, CFT 188, CFT 189

Advanced carving is a topical study of specific carving applications as they relate to furniture or architectural millwork. Topics are largely gathered from period styles and may include ball and claw feet, Newport shells, and Philadelphia rococo, as well as contemporary interpretations, Art Nouveau, and maritime themes. See Class Schedule for specific period styles/themes to be emphasized.

CFT 190 Specialty and Manufactured Hardware (.5,1,2,3)

1, 2, 4, or 6 hours lecture/laboratory

Note: May be taken 4 times

Survey of traditional, contemporary, European, and Oriental market hardware found in the cabinet and furniture industries, including consumer applications. Exploration and application of various system solutions for given problem(s). Study and application of hinges, K-D fasteners, fastening systems, joint systems, drawer guides, and runners.

CFT 195 Finishing Technology/Touch-Up and Repair (2,3,4)

4, 6, or 8 hours lecture/laboratory

Prerequisite: CFT 100

Finishes as used in the wood-related fields. Study and use of penetrating, surface, epoxy, catalytic, and resin surface finishes. Preparation to include staining, filling, and glazing. Chemistry of lacquers, urethanes, oils, and enamels. Instruction and practice in the touch-up of existing finishes through use of French polishing, burn-in sticks, and dry aniline staining. Repair of fine furniture as necessary prior to finishing.

CFT 196 Special Problems in Cabinet and Furniture Technology (1,2,3,4,5,6)

3, 6, 9, 12, 15, or 18 hours laboratory

Prerequisite: CFT 100 or 105

Note: May be taken 4 times

A research course through individual contract concentrating in the area of Cabinet and Furniture Technology.

CFT 197 Cabinet and Furniture 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 Cabinet and Furniture Technology. See class schedule for specific topic covered. Course title will designate subject covered.

CFT 198 Advanced Wood Finishing (2,3,4)

4, 6, or 8 hours lecture/laboratory

Prerequisite: CFT 195

Wood finishing history, processes, and application of multiple colors and complex finishes on furniture. Topics include media, solvents and tools used to apply media, faux finishes, gilding, coloring the finishing materials, turning broken or missing parts, and veneer repair.

CFT 295 Directed Study in Woodworking (1,2,3,4,5,6)

48, 96, 144, 192, 240, 288 hours laboratory

Prerequisite: CFT 105

Independent study in furniture making, cabinet making, shop layout, design, operation, and maintenance for students who have demonstrated advanced skills and/or proficiencies in Cabinet and Furniture Technology subjects and have the initiative to work independently on projects or research outside the context of regularly scheduled classes. Registration requires prior approval of supervising instructor.

Chemistry (CHEM)

Contact the Chemistry Department for further information, (760) 744-1150, ext. 2505

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

Chemistry

Provides the background to begin upper division course work and prepares the student for entry-level jobs that require a knowledge of chemistry. The student is advised to check with the institution to which he/she wishes to transfer for additional courses, which may be required.

A.A. Degree Major or Certificate of Achievement

Program Requirements		Units
CHEM 110	General Chemistry	3
CHEM 110L	General Chemistry Laboratory	2
CHEM 115	General Chemistry	3
CHEM 115L	General Chemistry Laboratory	2
CHEM 210	Analytical Chemistry	5
CHEM 220	Organic Chemistry	5
CHEM 221	Organic Chemistry	5
TOTAL UNITS		25

COURSE OFFERINGS

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

CHEM 10 Chemistry Calculations (1)

1 hour lecture

Note: Credit/No Credit grading only

The basic calculation skills needed for successful performance in CHEM 100, 110, and 115. Areas such as significant figures, exponential numbers, and basic chemical problems are discussed. Emphasizes student practice of chemistry problems.

CHEM 100 Fundamentals of Chemistry (4)

3 hours lecture-3 hours laboratory

Prerequisite: One year of high school algebra

Transfer acceptability: CSU; UC – no credit if taken after CHEM 110; CAN CHEM 6; CHEM 100+105=CAN CHEM SEQ B

Introductory study of the principles and laboratory techniques of general chemistry. Laboratory must be taken concurrently with lecture.

CHEM 101 The World of Chemistry (3)

3 hours lecture

Transfer acceptability: CSU; UC – no credit if taken after CHEM 110; UC – CHEM 101 and 102 combined: maximum credit, one course

An introduction to chemistry for non-science majors. Stresses a humanistic approach to chemistry and de-emphasizes mathematical problem solving. Includes chemical and physical discoveries and their impact on our standard of living, the formulation of chemical theories from chemical facts, and the use of chemical theories to make scientific and technological advances.

CHEM 102 Chemistry and Society (3)

3 hours lecture

Transfer acceptability: CSU; UC – no credit if taken after CHEM 110; UC – CHEM 101 and 102 combined: maximum credit, one course

Introductory course for non-science majors, to acquaint students with the language and tools of chemistry and to enable them to develop an appreciation for the role of chemistry in our environment and life's processes.

CHEM 105 Fundamentals of Organic Chemistry (4)

3 hours lecture-3 hours laboratory

Prerequisite: A minimum grade of "C" in CHEM 100, or CHEM 110 and 110L

Transfer acceptability: CSU; UC – CAN CHEM 8; CHEM 100+105=CAN CHEM SEQ B

An introduction to the study of organic chemistry with an emphasis on classification, reactions, and application to allied fields. Laboratory includes techniques of isolation, identification, and synthesis of organic compounds.

CHEM 110 General Chemistry (3)

3 hours lecture

Prerequisite: A minimum grade of "C" in CHEM 100 or high school chemistry with laboratory, and two years high school mathematics including algebra

Corequisite: CHEM 110L

Transfer acceptability: CSU; UC – CHEM 110+110L=CAN CHEM 2; CHEM 110+110L+115+115L=CAN CHEM SEQ A

Principles of, and calculations in, areas such as atomic structure, solutions, chemical bonding, chemical formulas and equations, gases, energy transformations accompanying chemical changes, and descriptive chemistry.

CHEM 110L General Chemistry Laboratory (2)

6 hours laboratory

Prerequisite: Concurrent enrollment in, or completion of, CHEM 110 with a minimum grade of "C"

Transfer acceptability: CSU; UC – CHEM 110+110L=CAN CHEM 2; CHEM 110+110L+115+115L=CAN CHEM SEQ A

Qualitative and quantitative investigations designed to accompany CHEM 110.

CHEM 115 General Chemistry (3)

3 hours lecture

Prerequisite: A minimum grade of "C" in CHEM 110 and 110L

Recommended preparation: Concurrent enrollment in CHEM 115L

Transfer acceptability: CSU; UC – CHEM 115+115L=CAN CHEM 4; CHEM 110+110L+115+115L=CAN CHEM SEQ A

Principles of, and calculations in, areas such as reaction spontaneity, energy changes accompanying chemical reactions, rates of reactions, chemical equilibrium, acids and bases, precipitation reactions, complex ions, oxidation and reduction, nuclear reactions, and descriptive chemistry.

CHEM 115L General Chemistry Laboratory (2)

6 hours laboratory

Prerequisite: A minimum grade of "C" in CHEM 110 and 110L; concurrent enrollment in, or completion of, CHEM 115

Transfer acceptability: CSU; UC – CHEM 115+115L=CAN CHEM 4; CHEM 110+110L+115+115L=CAN CHEM SEQ A

Qualitative and quantitative investigations designed to accompany CHEM 115.

CHEM 196 Special Laboratory Problems in Chemistry (2)

6 hours laboratory

Prerequisite: CHEM 105, or CHEM 110 and 110L; approval of project or research by department chairperson

Note: May be taken 2 times

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

Special laboratory investigations with emphases upon the use of chemical instrumentation and newer chemical techniques in the synthesis of compounds and/or the investigation of problems in the fields of inorganic, analytical or organic chemistry.

CHEM 197 Chemistry 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 Chemistry. See Class Schedule for specific topic offered. Course title will designate subject covered.

CHEM 205 Introductory Biochemistry (3)

3 hours lecture

Prerequisite: A minimum grade of "C" in CHEM 105**Transfer acceptability:** CSU; UC

Fundamental principles of the chemistry of living systems, including structure and function of proteins, nucleic acids, carbohydrates, and lipids. Emphasis on metabolism, energy storage and utilization.

CHEM 210 Analytical Chemistry (5)

3 hours lecture-6 hours laboratory

Prerequisite: A minimum grade of "C" in CHEM 115 and 115L**Transfer acceptability:** CSU; UC; CAN CHEM 12

Principles, calculations, and applications of volumetric, gravimetric, and instrumental analysis. Practice in standardizing reagents and determining the composition of samples of various materials.

CHEM 220 Organic Chemistry (5)

3 hours lecture-6 hours laboratory

Prerequisite: A minimum grade of "C" in CHEM 110 and 110L**Recommended preparation:** A minimum grade of "C" in CHEM 115 and 115L**Transfer acceptability:** CSU; UC

Integrated treatment of organic chemistry including electronic and orbital theory with applications to carbon bonding, stereo chemistry, resonance theory, and reaction mechanisms of both aliphatic and aromatic compounds. Strong emphasis on organic nomenclature, reactions, preparations, and synthesis of organic compounds. Laboratory: Techniques and theories involved in organic reactions and preparations, qualitative organic analysis, and instrumental methods.

CHEM 221 Organic Chemistry (5)

3 hours lecture-6 hours laboratory

Prerequisite: A minimum grade of "C" in CHEM 220**Recommended preparation:** A minimum grade of "C" in CHEM 115 and 115L**Transfer acceptability:** CSU; UC

Continuation of the integrated treatment of organic chemistry including electronic and orbital theory with applications to carbon bonding, stereo chemistry, resonance theory, and reaction mechanisms of both aliphatic and aromatic compounds. Strong emphasis on organic nomenclature, reactions, preparations, and synthesis of organic compounds. Laboratory: techniques and theories involved in organic reactions and preparations, qualitative organic analysis, and instrumental methods.

CHEM 295 Directed Study in Chemistry (1,2,3)

3, 6, or 9 hours laboratory

Prerequisite: Approval of project or research by department chairperson**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.

Independent study for students who have demonstrated skills and/or proficiencies in chemistry 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.

Chicano Studies (CS)**See also Multicultural Studies**

Contact the Multicultural Studies Department for further information, (760) 744-1150, ext. 2206

COURSE OFFERINGS**CS 100 Introduction to Chicano Studies (3)**

3 hours lecture

Transfer acceptability: CSU; UC

The development of contemporary Chicano culture including various pre-Columbian and Hispanic cultures in Mexico and the Southwest. A cross-disciplinary approach examines applicable methods and theories from sciences and humanities.

CS 101 The Chicano in the United States (3)

3 hours lecture

Note: This course plus CS 102 meets the State requirement in American History and Institutions.**Transfer acceptability:** CSU; UC

An historical survey of the Mexican-American/Chicano people in the United States. Emphasis on cultural and historical roots from pre-Columbian times through the Spanish conquest period and subsequent cultural and racial mix, including the U.S. American culture in the Southwest.

CS 102 The Chicano and the American Political System (3)

3 hours lecture

Note: This course plus CS 101 meets the State requirement in American History and Institutions.**Transfer acceptability:** CSU; UC – CS 102, AS 110 and AIS 102 combined: maximum credit, one course

A basic and practical approach to understanding and utilizing the American political system. Includes a critical evaluation of leading issues affecting Chicanos as well as a survey of social and political organizations within the community. A description and analysis of Federal, State, and local government.

CS 105 Chicano Literature (3)

3 hours lecture

Transfer acceptability: CSU; UC

A survey of Chicano literature from its pre-Columbian origins. Analyzes the identity conflicts resulting from the dual cultures of Mexican and American worlds through literary works. Introduces the student to the rich and culturally diverse Chicano and Chicana authors that reflect the literary traditions that have mirrored the Chicano-Mexican reality in the United States.

CS 110 Contemporary Mexican Literature (3)

3 hours lecture

Transfer acceptability: CSU; UC

A survey of Mexican novels, prose and poetry from the Mexican Revolution to the present. Major landmark novels of Mexico will be examined in their social and historical context. Designed to acquaint non-Spanish major students with Mexican thought, values, and literary heritage relative to world literature.

CS 115 Literature of Latin America (3)

3 hours lecture

Transfer acceptability: CSU; UC

A survey of Latin American Literature which covers several epochs, genres, authors, cultures, countries, and literary movements in Mexico, Central America, South America, and the Caribbean. Some countries will stand out more than others because of the accessibility of literary works in translation.

CS 120 Introduction to Sociology of the Chicano (3)

3 hours lecture

Transfer acceptability: CSU; UC

The Chicano and the Chicano community within contemporary American society seen from a sociological perspective. Includes socialization/acclulturation of the Chicano and the Chicano's role in societal institutions - family, marriage, religion, education, and economics.

CS 125 The History of Mexico (3)

3 hours lecture

Transfer acceptability: CSU; UC

A survey of the political, economic, and cultural development of the Mexican people and nation from the pre-Columbian period through the Revolution of 1910.

CS 155 Ancient Civilizations of Meso America (3)

3 hours lecture

Note: Cross listed as ANTH 155**Transfer acceptability:** CSU; UC

Civilizations of Pre-Columbian Mexico and Central America with a focus on their origins and achievements.

Child Development (CHDV)

Contact the Child Development Department for further information, (760) 744-1150, ext. 2206. 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

Child Development courses prepare students for employment as an aide, teacher, and/or director in a preschool or a child care center (including infant/toddler facilities), family child care providers, and other Child Development careers in early childhood education fields. Courses are also appropriate for parents, nannies, recreation leaders, camp counselors, elementary school teaching assistants (some classes may be used as a foundation for elementary school teachers), social services and health care practitioners, administrators, and others working with children.

Certificates meet the course requirements for teachers, site supervisors, and directors of private child care programs licensed by the California State Department of Social Services (Title 22), Community Care Licensing. The program also meets the course requirements for the Child Development Permit issued by the California Commission on Teacher Credentialing. Child Development programs that are state funded or federally funded (Title 5 programs such as, Head Start, state preschool, etc.) follow the Child Development Permit matrix. In addition to the course work listed in the certificate, students must have experience working with young children in order to obtain an actual Child Development Permit from the State of California. For specific questions relating to the Child Development Permit, please contact the Child Development Office for further information.

It is recommended that Child Development courses be taken in the sequence indicated in this certificate. In order to earn a certificate or degree, students must achieve a minimum grade of "C" in each of the required courses.

Child Development Teacher

The 38.5 units listed in this section enable students to complete a Teacher Certificate in Child Development.

Students also have the option of completing the General Education courses required by the college and the 38.5 units to earn an Associate of Arts Degree in Child Development.

A.A. Degree Major or Certificate of Achievement

Program Requirements	Units
CHDV 100*	Child Development 3
CHDV 105	Participation and Observation 4
CHDV 110	Introduction to Special Education 3
CHDV 115*	Child, Youth, Family, and Community 3
CHDV 120	Children's Health, Safety, and Nutrition 3
CHDV 121	CPR and First Aid for Child Care Workers .5
(This course can be challenged by showing a current CPR and FA card required by Community Care Licensing)	
CHDV 125	Art in Early Childhood 3
CHDV 130	Math/Science Early Childhood 3
CHDV 135	Music/Creative Movement 3
CHDV 140	Children's Literature/Language Development 3
CHDV 145	Children: Victims of Violence 3
CHDV 185	Advanced Curriculum/Early Child Education 3
CHDV 200**	Program/Supervised Experiences 4
TOTAL UNITS	38.5

*Minimum course for 12 units for State Licensing Regulations, CHDV

100, 115 and two other curriculum three unit CHDV courses.

**CHDV 200 should be taken in the last semester in this certificate or A.A. degree major program.

Elective Child Development courses (Not required for Certificates)		Units
CHDV 197 A	Child Development Workshop: Cultural Arts	.5-4
CHDV 197 B	Child Development Wksp: Hlth/Safety/Nutrtn	.5-4
CHDV 197 C	Child Development Wksp: Professional Educ.	.5-4
CHDV 197 D	Child Development Workshop: Parenting	.5-4
CHDV 295	Directed Study in Child Development	1,2,3

Child Development Master Teacher

In order to earn a Master Teacher Certificate, students must complete the 38.5 units listed for the Teacher Certificate and a combination of 9 additional units listed in this section.

Certificate of Achievement

Program Requirements		Units
Requires all Child Development Teacher Certificate courses		38.5
Plus:		
CHDV 195	Adult Supervision/Mentor Teacher AND	3
One of the following course groupings:		
CHDV 102	Parents as Partners in the Early Years	3
CHDV 104	Guidance for Young Children	3
OR		
CHDV 180	Understand/Work/ with the School-Age Child	3
CHDV 190	Curriculum for the School-Age Child	3
OR		
CHDV 103	Infant and Toddler Care	3
CHDV 106	Infant and Toddler Curriculum	3
TOTAL UNITS		47.5

Child Development Site Supervisor

In order to earn a Site Supervisor Certificate, students must complete the 38.5 units listed for the Teacher Certificate and the additional 9 units listed in this section.

Certificate of Achievement

Program Requirements		Units
Requires all Child Development Teacher courses		38.5
Plus:		
CHDV 195	Adult Supervision/Mentor Teacher	3
CHDV 150	Advanced Administration for Childhood Directors	3
<u>CHDV 155</u>	<u>Advanced Supervision for Childhood Directors</u>	<u>3</u>
TOTAL UNITS		47.5

COURSE OFFERINGS

CHDV 100 Child Development	(3)
<i>3 hours lecture</i>	
Transfer acceptability: CSU; UC	
A broad overview of human development from conception through adolescence with research and theories applied to modern society. Extensive information to assist in understanding human growth and development.	
CHDV 102 Parents as Partners in the Early Years	(3)
<i>3 hours lecture</i>	
Transfer acceptability: CSU	
Assists teachers and child care providers in developing a family centered approach to parent involvement. Explores different kinds of families, working with families of diverse cultures and families with children with special needs. Includes communication skills, home visits, conferences, group meetings, and stages of parenting.	
CHDV 103 Infant and Toddler Care	(3)
<i>3 hours lecture</i>	
Transfer acceptability: CSU	
Concepts of effective practice for infant and toddler care with emphasis on communication, cultural differences, problem solving, and providing a safe and nurturing environment.	

CHDV 104 Guidance for Young Children (3)*3 hours lecture***Transfer acceptability:** CSU

Designed to increase understanding of children's behavior. Explores effective techniques for dealing with issues of separation, peer interaction, fears, frustrations and aggression. Emphasizes teaching

children pro-social interactions, self control, and decision making skills.

CHDV 105 Participation and Observation in Early Childhood Education (4)*3 hours lecture-3 hours laboratory***Prerequisite:** CHDV 100**Transfer acceptability:** CSU

Students will analyze developmentally appropriate child development practices by observing and recording behaviors of children from infancy through age eight. Techniques, methods and organization of factual information concerning the young child will be implemented.

CHDV 106 Infant and Toddler Curriculum (3)*3 hours lecture*

A survey of program and activity planning for infants and toddlers in child care programs, emphasizing areas of attachment, motor skills, cognition, language and communication skills, environments. Strategies for working with parents, observation and assessment skills and the need for professional development will be explored.

CHDV 110 Introduction to Special Education (3)*3 hours lecture***Transfer acceptability:** CSU

Introduces student to historical antecedents of education programs for the exceptional individual. Includes the role of superstition, religion, research, litigation, and legislation.

CHDV 115 Child, Youth, Family, and Community (3)*3 hours lecture***Transfer acceptability:** CSU

The study of the child and youth in relation to the family, school, and community; family relationships; factors affecting parental attitudes; and values of individuals and families.

CHDV 120 Children's Health, Safety, and Nutrition(3)*3 hours lecture***Transfer acceptability:** CSU

Physical, psychosocial, and mental health including immunizations and infectious disease control. Emphasis is placed on development of understandings and practices of a preventative health system including sanitary food handling, child nutrition, child abuse, and emergency preparedness and evacuation. Health assessments and the changing of health behaviors are stressed. Create, assess and monitor safe indoor and outdoor environments for children.

CHDV 121 Pediatric CPR and First Aid (.5)*½ hour lecture***Note:** May be taken 4 times, Credit/No Credit grading only.

Prepares childcare workers, parents, and other adults working with children for skills and knowledge required for pediatric first aid and CPR.

CHDV 125 Art in Early Childhood (3)*3 hours lecture***Transfer acceptability:** CSU

Methods and processes for developing creativity through art for young children. A study of fundamental teaching methods, preparation of lesson plans, and materials used in art will be explored. An emphasis will be placed on the developmental and experiential approaches and techniques.

CHDV 130 Math and Science in Early Childhood (3)*3 hours lecture***Transfer acceptability:** CSU

Students will examine math and science concepts for ages preschool through eight years. Teaching methods and materials will be developed and implemented.

CHDV 135 Music and Creative Movement in Early Childhood (3)*3 hours lecture***Transfer acceptability:** CSU

Developing creative experiences through music and movement activities. Songs, movement, and instrument experiences will be presented. Appropriate lesson plans and techniques will be developed.

CHDV 140 Children's Literature and Language Development (3)*3 hours lecture***Transfer acceptability:** CSU

Survey of historic and contemporary children's literature. A critical look at children's books and the process of choosing age appropriate books for children infancy through adolescence.

CHDV 145 Children: Victims of Violence (3)*3 hours lecture***Transfer acceptability:** CSU

Prepares the student to identify, report, and work with families who interact violently. Includes the historical background and legal aspects of child abuse.

CHDV 150 Advanced Administration for Early Childhood Directors (3)*3 hours lecture***Recommended preparation:** CHDV 100, 110, 115, 120, 145, 185**Transfer acceptability:** CSU

Application of basic management principles in Child Development programs including State regulations, funding, budget preparation, and policy writing.

CHDV 155 Advanced Supervision for Early Childhood Directors (3)*3 hours lecture***Recommended preparation:** CHDV 100, 110, 115, 120, 145, 185**Transfer acceptability:** CSU

The student will explore the tools that generate productive staff management and identify supervisory techniques such as staff motivation, staff benefits, team building, leadership skills, and situation leadership.

CHDV 180 Understanding and Working with the School-Age Child (3)*3 hours lecture***Transfer acceptability:** CSU

Designed to prepare students to work with children ages five through adolescence, by focusing on the development of the children in this age group. Students will study developmental theories and the practical implications of these theories when working with the school-aged child. Licensing regulations for Title 5 and 22 programs will be explored.

CHDV 185 Advanced Curriculum in Early Childhood Education (3)*3 hours lecture***Prerequisite:** CHDV 105**Recommended preparation:** CHDV 115, 120, 125, 130, 135, 140**Transfer acceptability:** CSU

Explicit, concrete examples of curriculum application are provided along with theoretical principles and practical application.

CHDV 190 Curriculum for the School-Age Child (3)*3 hours lecture*

A survey of programs and activities planning for school-age children, including both before and after school curriculum and activities for groups and individuals.

CHDV 195 Adult Supervision/Mentor Teacher (3)*3 hours lecture***Prerequisite:** CHDV 105 and 115**Transfer acceptability:** CSU

Methods and principles of supervising student teachers in early childhood classrooms. Emphasizes the role of the experienced classroom teacher who functions as a mentor to new teachers while simultaneously addressing the needs of children, parents, and other staff.

CHDV 197A Child Development Workshop: Cultural Arts (.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 for a maximum of 9 units

Transfer acceptability: CSU

Workshop to provide upgrading of knowledge and skills in state-of-the-art techniques in cultural arts; to include speakers, seminars, and in-service training in current aspects of child development.

CHDV 197B Child Development Workshop: Health, Safety, and Nutrition (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 for a maximum of 9 units

Transfer acceptability: CSU

Workshop will provide current knowledge and skills in state-of-the-art techniques in infant, child, and adolescent health, safety, food service, nutrition, communicable disease, pediatric CPR and first aid, and injury control. Includes speakers, seminars, and in-service training in current aspects of child development.

CHDV 197C Child Development Workshop: Professional Education (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 for a maximum of 9 units

Transfer acceptability: CSU

Workshop will provide current knowledge and skills in state-of-the-art techniques in professional education which includes speakers, seminars, and in-service training in current aspects of child development.

CHDV 197D Child Development Workshop: Parenting (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 for a maximum of 9 units

Transfer acceptability: CSU

Concepts of effective parenting in various family structures including: nuclear, single parent, extended, and step family. An emphasis will be placed on communication and problem solving, discipline, and values. A one-unit class will satisfy court mandated parenting requirements. Verification given upon request. Student must attend all class sessions to receive verification.

CHDV 200 Program and Supervised Experiences in Early Childhood (4)

2 hours lecture-6 hours laboratory

Prerequisite: Completion of, or concurrent enrollment in CHDV 100, 105, 110, 115, 120, 121, 125, 130, 135, 140, 145, 185, ENG 100

Transfer acceptability: CSU

In a supervised teaching situation, students will implement lesson plans, activities, develop teaching strategies, complete self-evaluations, initiate resume development, review the job application process, and participate in mock interviews.

CHDV 295 Directed Study in Child Development (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 for a maximum of 6 units

Transfer acceptability: CSU

Independent study for students who have demonstrated skills and/or proficiencies in child development 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.

Chinese (CHIN)

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.

CHIN 101 Chinese I (5)

5 hours lecture-1 hour laboratory

Transfer acceptability: CSU; UC-CHIN 101+102= CAN CHIN SEQ A

This course is the first semester of Chinese. This elementary level course is a study of the Chinese language and Chinese-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 Chinese.

CHIN 101A Chinese IA (3)

3 hours lecture

Transfer acceptability: CSU; UC - CHIN 101A and 101B combined: maximum credit, 5 units; UC - both courses must be taken for transfer credit to be given

Chinese 101A is equivalent to the first half of Chinese 101. This elementary level course is a study of the Chinese language and Chinese-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 Chinese.

CHIN 101B Chinese IB (3)

3 hours lecture

Prerequisite: CHIN 101A or one year of high school Chinese

Transfer acceptability: CSU; UC - CHIN 101A and 101B combined: maximum credit, 5 units; UC - both courses must be taken for transfer credit to be given

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

CHIN 102 Chinese II (5)

5 hours lecture-1 hour laboratory

Prerequisite: CHIN 101 or 101B or two years of high school Chinese

Transfer acceptability: CSU; UC-CHIN 101+102= CAN CHIN SEQ A

This course is the second semester of Chinese. This elementary level course is a study of the Chinese language and Chinese-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.

CHIN 102A Chinese IIA (3)

3 hours lecture

Prerequisite: CHIN 101 or 101B or two years of high school Chinese

Transfer acceptability: CSU; UC - CHIN 102A and 102B combined: maximum credit, 5 units; UC - both courses must be taken for transfer credit to be given

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

CHIN 102B Elementary Chinese IIB (3)

3 hours lecture

Prerequisite: CHIN 102A or two years of high school Chinese

Transfer acceptability: CSU; UC - CHIN 102A and 102B combined: maximum credit, 5 units; UC - both courses must be taken for transfer credit to be given

Chinese 102B is equivalent to the second half of Chinese 102,

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

CHIN 130 Chinese Civilization (3)

3 hours lecture

Transfer acceptability: CSU; UC

A survey of the major developments and characteristics of Chinese civilization and culture from its origins to modern times.

CHIN 197 Chinese 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 Chinese. See Class Schedule for specific topic offered. Course title will designate subject covered.

CHIN 201 Chinese III (5)

5 hours lecture

Prerequisite: CHIN 102 or 102B, or three years of high school Chinese

Transfer acceptability: CSU; UC

This course is the third semester of Chinese. This intermediate level course is a study of the Chinese language and Chinese-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 Chinese. Class is largely conducted in Chinese.

CHIN 201A Chinese IIIA (3)

3 hours lecture

Prerequisite: CHIN 102 or 102B, or three years of high school Chinese

Transfer acceptability: CSU; UC – CHIN 201A and 201B combined: maximum credit, 5 units; UC – both courses must be taken for transfer credit to be given

Chinese 201A is equivalent to the first half of Chinese 201. This intermediate level course is a study of the Chinese language and Chinese-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 Chinese. Class is largely conducted in Chinese.

CHIN 201B Chinese IIIB (3)

3 hours lecture

Prerequisite: CHIN 201A

Transfer acceptability: CSU; UC – CHIN 201A and 201B combined: maximum credit, 5 units; UC – both courses must be taken for transfer credit to be given

Chinese 201B is equivalent to the second half of Chinese 201, and is a continuation of Chinese 201A. This intermediate level course is a study of the Chinese language and Chinese-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 Chinese. Class is largely conducted in Chinese.

Cinema (CINE)

See also Journalism, and Radio/Television

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.

PROGRAM OF STUDY

Cinema

Provides the theory and practice necessary for work in the field of film making.

A.A. Degree Major or Certificate of Achievement

Program Requirements	Units
CINE 100 Art of the Cinema	3
CINE 102 History of Film to 1945	3
CINE 103 History of Film 1945-Present	3
CINE 105 Film Subjects	3
CINE 120 Film Criticism	3
CINE/RTV 125 Beginning Film and Video Field Production	3
CINE/RTV 225 Intermediate Film and Video Field Production	3
Electives (Select 6 units)	
CINE 110 The Non-Fiction Film	3
CINE/RTV 115 Creative Writing for TV/Cinema	3
CINE 296 Special Projects	1,2,3
RTV 110 Broadcast Writing and Producing	3
TOTAL UNITS	27

COURSE OFFERINGS

CINE 100 Art of the Cinema (3)

3 hours lecture

Transfer acceptability: CSU; UC

An aesthetic study of the film. Areas of investigation will include symbolism, characterization, imagery, and uses of realism and fantasy. Criticism of important films will be in terms of thematic coherence, structural unity, technical achievement, and visual beauty. Off-campus programs may be required.

CINE 102 History of Film to 1945 (3)

3 hours lecture

Transfer acceptability: CSU; UC

A survey of the development of the motion picture as an art form and cultural phenomenon from its inception to the end of World War II, including early inventors, pioneers of cinematic grammar, and major film movements such as German Expressionism, Soviet Montage, and the golden age of the American studio system. Films are regularly screened in the classroom.

CINE 103 History of Film 1945-Present (3)

3 hours lecture

Transfer acceptability: CSU; UC

A survey of the development of the motion picture as an art form and cultural phenomenon from the end of World War II to the present day, including major film movements such as Italian Neorealism, Film Noir, the French New Wave, and the American Renaissance of the 1960s-70s. Films are regularly screened in the classroom.

CINE 105 Film Subjects (3)

3 hours lecture

NOTE: May be taken 4 times

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

A study of selected motion picture themes such as women in films, the western, the films of Hitchcock/Chabrol. Check the Class Schedule each semester for the particular subject.

CINE 110 The Non-Fiction Film (3)

3 hours lecture

Transfer acceptability: CSU; UC

A study of the complete spectrum of this vital genre, including the documentary, political propaganda, personal poetic statement, and travel record. Regular film programs of Flaherty, Grierson, Leacock, Maysles, and Wiseman will be shown.

CINE 115 Creative Writing for Television and Cinema (3)

3 hours lecture

Note: Cross listed as RTV 115

Transfer acceptability: CSU

Instruction and practice in the art of dramatic script writing. Emphasis is placed on the development of the initial story idea into a viable, professional shooting script for TV or film.

CINE 120 Film Criticism (3)

3 hours lecture

Transfer acceptability: CSU; UC

A study of the writing of major film critics. The work of Kael, Sarris, Youngblood, Farber, and others will be considered in the attempt to formulate aesthetic standards for cinema. Motion picture viewing assignments will be made in connection with the readings.

CINE 125 Beginning Film and Video Field Production (3)

6 hours lecture/laboratory

Note: Cross listed as RTV 125**Transfer acceptability:** CSU; UC – CINE/RTV 125 and 225 combined: maximum credit, one course

A study of the basic techniques of field production using Super 8 or 16mm film or analog or digital video equipment as applied to various cinematic forms. The student will work with a team on a project through the preproduction, shooting, and postproduction phases of storytelling for the screen.

CINE 225 Intermediate Film and Video Field Production (3)

6 hours lecture/laboratory

Prerequisite: A minimum grade of "C" in RTV 110 and CINE/RTV 125**Note:** Cross listed as RTV 225**Transfer acceptability:** CSU; UC – CINE/RTV 125 and 225 combined: maximum credit, one course

Principles, techniques, and theory of field production using digital or analog video or 16mm film equipment. Theory and practice of off-line linear or nonlinear editing.

CINE 296 Special Projects in the Cinema (1,2,3)

3, 6, or 9 hours laboratory

Prerequisite: CINE 115/RTV 115 or CINE 225/RTV 225**Note:** May be taken 2 times**Transfer acceptability:** CSU; UC – Credit determined by UC upon review of course syllabus.

Independent work on an original film project. The instructor will approve the work plan and afford personal guidance in its completion. Normally a student will make a fully satisfactory and acceptable screenplay or short film.

Communications (COMM)**See also Cinema, Journalism, and Radio/Television**

Contact the Communications Department for further information, (760) 744-1150, ext. 2440. For transfer information, consult a Palomar College counselor.

COURSE OFFERINGS**COMM 100 Mass Media in America (3)**

3 hours lecture

Transfer acceptability: CSU; UC – COMM 100 and 105 combined: maximum credit, one course; CAN JOUR 4

A multi-media approach to a comparative survey of communication in 20th century America, studying the history, structure, and social impact of television, cinema, radio, journalism, and new forms of communication.

COMM 105 Human Values in the Mass Media (3)

3 hours lecture

Transfer acceptability: CSU; UC – COMM 100 and 105 combined: maximum credit, one course

An analysis of the changing social and ethical issues that confront both our mass communication systems and the public. The media's role in reflecting, creating, and controlling human values, both personal and social. Examination of images of women, African-Americans, Native Americans, Asian-Americans, and Latinos in the mass media and their sociological consequences.

Computer Science and Information Systems (CSIS)

Contact the Computer Science and Information Systems Department for further information, (760) 744-1150, ext. 2387 or <http://www.palomar.edu/csiss>

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**Cisco**

The Cisco networking program is designed to teach students the skills needed to design, build, and maintain small to medium-sized networks. This provides students the opportunity to enter the workforce and/or further their education and training in the computer-networking field.

Certificate of Proficiency

Program Requirements		Units
CSIS 130	Cisco Networking Fundamentals	3
CSIS 131	Cisco Router Configuration	3
CSIS 132	Cisco Adv Routing/Switching	3
CSIS 133	Cisco WAN Design/Support	3
TOTAL UNITS		12

Computer Network Administration

This program prepares the student for employment in the field of Computer Networking. The focus is on developing skills in a combination of the Network Operating Systems produced by Cisco, Microsoft, and UNIX. Specific learning outcomes include developing team dynamics in the following skills: Network Media Installation, LAN and WAN Design, Network Management, Fundamentals of Networking Devices, Client Hardware Repair, Network Operating Systems Installation and Configuration, Networking Device Operating Systems, Installation and Configuration, Client Operating Systems Installation and Configuration, Network Security, Remote Access, Routing Principles and Configuration, and Maintaining a Corporate Network.

In order to earn a certificate or degree, students must achieve a minimum grade of "C" in each of the certificate or degree program courses.

A student must complete the required degree courses and all of the courses in a chosen elective emphasis. The student may choose from the following elective emphases: Microsoft and Unix Management, Cisco and Unix Management, or Cisco and Microsoft Management

A.A. Degree Major*

Program Requirements		Units
CSIS 108 or R CSIS 155	Hardware and OS Fundamentals Computer Technology – Hardware	3
CSIS 130 or CSIS 111 or RCSIS 160	Cisco Networking Fundamentals Networking Fundamentals Introductions to Local Area Networking	3,4
CSIS 160	Survey of Computer Science	4
CSIS 162 or R CSIS 157	Windows Client Windows XP Professional and Server	3
CSIS 163	Windows Server	3
CSIS 225 or R CSIS 145	Linux Fundamentals Introduction to Linux	2
CSIS 136 or RCSIS 161	Hacker Prevention/Network Security PC/Network Security	3
CSIS 135	Wireless Networking	2

Emphasis: Microsoft and UNIX Management

Note: By adding CSIS 131, CSIS 132 and CSIS 133 to your Microsoft and Unix Management Emphasis you can also earn a Certificate of Proficiency in Cisco in addition to your Computer Network Administration A.A. Degree.

Required Courses		
CSIS 164	Network Infrastructure Administration	3
CSIS 165	Active Directory Services Administration	3
CSIS 227	Linux Administration	2
CSIS 228	Linux Networking and Security	2

Group One Electives (Select 2 courses)

CSIS 166	Designing Active Directory Services	2
CSIS 167	Designing Network Infrastructure	2
CSIS 168	Designing Network Security	2

Group Two Elective (Select 1 course)

CSIS 172	Microsoft SQL Server Administration	2
CSIS 173	Designing Microsoft SQL Server Databases	2
CSIS 176	Managing a Windows Network	2
CSIS 177	Microsoft Exchange Server	2

Emphasis: Cisco and UNIX Management

Note: CSIS 130 is a prerequisite for CSIS 131

CSIS 131	Cisco Router Configuration	3
CSIS 132	Cisco Advanced Routing and Switching	3
CSIS 133	Cisco Wide Area Network Design and Support	3
CSIS 134	Network Voice and Data Cabling	3
CSIS 227	Linux Administration	2
CSIS 228	Linux Networking and Security	2

Emphasis: Cisco and Microsoft Management

Note: CSIS 130 is a prerequisite for CSIS 131

CSIS 131	Cisco Router Configuration	3
CSIS 132	Cisco Advanced Routing and Switching	3
CSIS 133	Cisco Wide Area Network Design and Support	3
CSIS 134	Network Voice and Data Cabling	3
CSIS 164	Network Infrastructure Administration	2
CSIS 166	Designing Active Directory Services	2

Total Program Units 38-40

***Computer Network Administration A. A. Degree Major pending approval by Chancellor's Office at time of catalog publication.**

Computer Science

This program prepares students for technical positions in software development in business and industry. See a Counselor for additional university transfer requirements in this major.

A.A. Degree Major or Certificate of Achievement

Program Requirements		Units
CSIS 160	Survey of Computer Science	4
CSIS 220	Programming for Computer Science	4
CSIS 221	Data Structures	4.5
CSIS 222	Machine Organization and Assembler Language	4
CSIS 280	C++ and Object-Oriented Programming	4

Group One (Select 12 – 16 units)

CSIS 111	Networking Fundamental	3
CSIS 235*	C for Programmers	4
CSIS 240	Video Game Programming	4
CSIS 245	Systems Analysis and Design	4
CSIS 252	Introduction to Oracle	3
CSIS 282	C# Programming	3
CSIS 285	Windows Programming I	4
CSIS 288	Windows Programming II	4
MATH 245	Discrete Mathematics	3

Group Two (Select 2-3 units)

CSIS 138	JavaScript	3
CSIS 194	Perl and CGI Scripting	3
CSIS 225	LINUX Fundamentals	2

TOTAL UNITS 34.5 – 40.5

*Not recommended for students who have completed CSIS 220 in C.

Desktop Support Specialist

Desktop support specialists are qualified to successfully troubleshoot, repair and upgrade the desktop computer including hardware and software in a networked environment.

Certificate of Proficiency

Program Requirements		Units
CSIS 108 or	Hardware and OS Fundamentals	3
RCSIS 156	Computer Technology Software	4
CSIS 111	Networking Fundamentals	3
CSIS 163	Windows Client	3
CSIS 163	Windows Server	3
Electives (Select 1 course)		
CSIS 176	Managing a Windows Network	2
CSIS 227	Linux Administration	2
TOTAL UNITS		15

Information Systems

This program prepares students for employment in information systems applications development in business and industry. The focus is on developing skills in Visual Basic, Internet, spreadsheets, databases, presentation graphics, word processing, in systems analysis and design, and database design. See a counselor for additional university transfer requirements in this major.

A.A. Degree Major or Certificate of Achievement

Program Requirements		Units
CSIS 105	Computer Concepts/Microcomputer Applications	3
CSIS 117	Introduction to Visual Basic	4
CSIS/		
RCSIS 120	Microcomputer Applications	3
CSIS/		
RCSIS 137	Web Site Development with HTML	2
CSIS 214	Intermediate Visual Basic	4
CSIS 217	Advanced Visual Basic	4
CSIS 245	Systems Analysis and Design	4
CSIS 252	Introduction to Oracle	3

Electives (Select 4 -5 units)

CSIS 268	Active Server Pages	3
CSIS 218	Visual Basic for Applications	2
CSIS 225	Linux Fundamentals	2
GC/RGC 200	Introduction to Multimedia	3
TOTAL UNITS		31-32

Microsoft SQL Database Administrator

Microsoft SQL Database Administrator is a validation program that provides a reliable measure of technical proficiency and expertise in implementation and administration of Microsoft SQL Server™ databases.

Certificate of Proficiency

Program Requirements		Units
CSIS 111	Networking Fundamentals	4
CSIS 163	Windows Server	3
CSIS 164	Network Infrastructure Administration	3
CSIS 172	Microsoft SQL Server Administration	2
CSIS 173	Microsoft SQL Server Database Design	2
TOTAL UNITS		14

Microsoft Office User Specialist

The Microsoft Office User Specialist (MOUS) Program is a validation program that provides proof of proficiency in Microsoft Office applications. It is available for Microsoft Office applications at both Proficient and Expert User levels. As a general rule of thumb, Proficient Specialists can handle a wide range of everyday tasks with ease. Expert Specialists are expected to do all those everyday tasks, plus handle more complex assignments that require more advanced formatting and functionality.

Users who attain Expert Specialist status on all five core Office applications (Word, Excel, Access, PowerPoint, and Outlook) qualify to take the Microsoft Office Integration Exam. Passing this exam demonstrates that the user is not

only an expert in the individual Office products, but is also skilled in integrating them into a cohesive whole. This entitles the user to be called a Microsoft Office Expert.

Certificate of Proficiency

Program Requirements	Units
CSIS 127 Word	1
CSIS 174 Excel	1
CSIS 179 Access	1
CSIS 185 PowerPoint	1
CSIS 188 Outlook	1
TOTAL UNITS	5

Network Engineer

Network Engineers are qualified to effectively plan, implement, maintain, troubleshoot and support networks in a wide range of computing environments using Microsoft Windows.

Certificate of Proficiency

Program Requirements	Units
CSIS 163 Windows Server	3
CSIS 164 Network Infrastructure Administration	3
CSIS 165 Active Directory Services Administration	3
Group One Electives (Select 1 course)	
CSIS 166 Designing Active Directory Services	2
CSIS 167 Designing Network Infrastructure	2
CSIS 168 Designing Network Security	2
Group Two Electives (Select 2 courses)	
CSIS 166 Designing Active Directory Services	2
CSIS 167 Designing Network Infrastructure	2
CSIS 168 Designing Network Security	2
CSIS 172 Microsoft SQL Server Administration	2
CSIS 173 Design MS SQL Server Databases	2
CSIS 176 Managing a Windows Network	2
CSIS 177 Microsoft Exchange Server	2
CSIS 228 Linux Networking and Security	2
TOTAL UNITS	15

Oracle Database

Oracle is the most widely used relational database management system in the world. This certificate offers a series of courses designed to provide the fundamentals to become successful in the use of this powerful database system.

Certificate of Proficiency

Program Requirements	Units
CSIS 252 Introduction to Oracle	3
CSIS 256 Database Administration I	3
CSIS 257 Database Administration II	3
CSIS 258 Database Performance Tuning	3
Electives (Select 1 course)	
CSIS 254 Oracle Data Base Design	3
CSIS 259 Oracle PL/SQL Programming	3
TOTAL UNITS	15

UNIX Operating System

This certificate program in UNIX is designed for those currently in the computer industry who want to upgrade their skills, and for those with basic computer literacy who want to enter this fast-growing field. Being fluent in UNIX can make the difference in winning a job or promotion, as more personnel directors regard knowledge and fluency in UNIX principles as key criteria for job recruitment and selection.

Certificate of Proficiency

Program Requirements	Units
CSIS 225 Linux Fundamentals	2
CSIS 226 Linux Shell Scripting	2
CSIS 227 Linux Administration	2
CSIS 228 Linux Networking and Security	2
CSIS 235 C for Programmers	4
TOTAL UNITS	12

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/RGC140 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

The Video Game Artist program is also offered in Graphic Communications.

Video Game Specialist

This certificate program introduces students to the video game industry, game design and programming.

Certificate of Proficiency

Program Requirements	Units
CSIS 240 Video Game Programming	4
CSIS 240 Video Game Programming (repeat for Advanced project)	4
CSIS 241 Overview of the Video Game Industry	4
CSIS 242 Game Design	4
TOTAL UNITS	16

Visual Basic

This certificate is designed for individuals interested in acquiring the advanced programming skills necessary to design and implement Visual Basic programs.

Certificate of Proficiency

Program Requirements	Units
CSIS 117 Introduction to Visual Basic	4
CSIS 214 Intermediate Visual Basic	4
CSIS 217 Advanced Visual Basic	4
CSIS 268 Active Server Pages	3
TOTAL UNITS	15

Voice and Data Cable Installer

This program provides students a strong foundation in Networking with an emphasis on the Physical, Data-link and Network Layers of the OSI model. It is designed to provide students with the knowledge of in-depth physical connectivity of networks and how data is transmitted across the media. This will prepare the student to achieve the BISCi installer's certificate and/or further their education and training in the computer-networking field with an emphasis on installations.

Certificate of Proficiency

Program Requirements		Units
CSIS 108 or	Hardware and O.S. Fundamentals	
R CSIS 156	Computer Technology-Software	3
CSIS 111	Networking Fundamentals	4
CSIS 134	Network Voice and Data	4
TOTAL UNITS		11

Web Developer

This program includes the Web page design and programming languages that allow a developer to build dynamic Web applications. The student may choose an emphasis on either the Java/Open Source or Windows platforms.

Certificate of Proficiency***Emphasis in Java / Open Source***

Program Requirements		Units
CSIS/		
RCSIS 137	Web Site Development with HTML	2
CSIS 138	JavaScript	3
CSIS 191	PHP with MySQL	3
CSIS 194	Perl and CGI Scripting	3
CSIS 272	Java Programming for Information Systems	3

Elective Courses (select 1 course)

CSIS 139	Adv Web Site Development	3
CSIS 195	Python Programming	3
CSIS 196	Introduction to SQL	3
CSIS 252	Introduction to Oracle	3
CSIS 273	Java Servlets and JSPs	3
CSIS 294	Enterprise JavaBeans and J2EE	3
GC 144	Web Graphics	3
GC/RGC 202	Web Page Layout I	3
TOTAL UNITS		17

Emphasis in Windows

Program Requirements		Units
CSIS/		
RCSIS 137	Web Site Development with HTML	2
CSIS 138	JavaScript	3
CSIS 139	Adv Web Site Development	3
CSIS 268	Active Server Pages	2
CSIS 282	C# Programming	3

Elective Courses (select 1 course)

CSIS 173	Design MS SQL Server Databases	2
CSIS 272	Java Programming for Information Systems	3
CSIS 273	Java Servlets and JSPs	3
GC 144	Web Graphics	3
GC/RGC 202	Web Page Layout I	3
TOTAL UNITS		15-16

Web Server Administrator

This program includes the use and implementation of web-networked environments for the purpose of administering Internet/Intranet applications. Strong emphasis is placed on hands-on server administration, networking, supplemented with web development and design. The student may choose an emphasis on either the UNIX or Windows platforms.

Certificate of Proficiency***Emphasis in UNIX***

Program Requirements		Units
CSIS/		
RCSIS 137	Web Site Development with HTML	2
CSIS 194	Perl and CGI Scripting	3
CSIS 225	Linux Fundamentals	2
CSIS 227	Linux Administration	2
CSIS 228	Linux Networking and Security	2

Elective Courses (select 2 courses)

CSIS 226	Linux Shell Scripting	2
CSIS 266	Implementing/Admin Web Servers	2.5
CSIS 269	Web Security and E-Commerce	2
GC 217	Online Store Design I	3
TOTAL UNITS		15 – 16.5

Emphasis in Windows

Program Requirements		Units
CSIS/		
RCSIS 137	Web Site Development with HTML	2
CSIS 162	Windows Client	3
CSIS 163	Windows Server	2
CSIS 172	Microsoft SQL Server Administration	2

Elective Courses (select 1 course)

CSIS 173	Design MS SQL Server Databases	2
CSIS 266	Implementing/Admin Web Servers	2.5
CSIS 269	Web Security and E-Commerce	2
GC 217	Online Store Design I	3
TOTAL UNIT		11-12

COURSE OFFERINGS**CSIS 105 Computer Concepts and Microcomputer Applications (3)**

2 hours lecture-2 hours lecture/laboratory

Transfer acceptability: CSU; UC – no credit if taken after CSIS 160 or 220

The study of computer concepts and basic proficiency in modern application software. Computer concepts will focus on basic terminology; computer literacy; hardware; software; information systems; state of the art technology; structured design techniques; overview of the computer industry; ethics and current issues including virus protection and prevention. Hands on introduction to Windows operating system and application software including basic proficiency of the Internet; browsers; e-mail; word processing; electronic spreadsheets; data base and presentation graphics application programs.

CSIS 108 Hardware and O.S. Fundamentals (3)

2 hours lecture-2 hours lecture/laboratory

This course provides students with the knowledge and skills necessary to build a foundation in computer hardware and operating systems. It will include P.C. hardware and operating system fundamentals; installation, configuration and upgrading; diagnosing and troubleshooting; preventative maintenance; motherboards, processors, and memory; printers; and basic networking including network operating systems.

CSIS 111 Networking Fundamentals (4)

3 hours lecture-2 hours lecture/laboratory

Transfer acceptability: CSU

This course provides students with the knowledge and skills necessary to build a solid foundation in computer networking. It will include networking fundamentals, the OSI model, subnetting, features and functions of networking components and the skills needed to install, configure, and troubleshoot basic networking hardware peripherals and protocols.

CSIS 117 Introduction to Visual Basic (4)

3 hours lecture-2 hours lecture/laboratory

Transfer acceptability: CSU

Students design, create, test and run computer applications using Visual Basic. Emphasis is on learning the fundamentals of the Visual Basic interface and how to solve problems using structured design logic and the sequence, decision and repetition procedural language control structure. Selected additional features of the Visual Basic interface and procedural language are included to provide a foundation for the study of more advanced courses.

CSIS 120 Microcomputer Applications (3)

1 hour lecture-4 hours lecture/laboratory

Note: Cross listed as RCSIS 120; may be taken 4 times; maximum of 4 completions in any combination of CSIS/R CSIS 120, CSIS 121

Transfer acceptability: CSU

Hands-on experience with microcomputers and microcomputer applications featuring the use of Windows, word processing, spreadsheet, database, and presentation graphics software.

CSIS 121 Advanced Microcomputer Applications (3)*1 hour lecture-4 hours lecture/laboratory***Prerequisite:** CSIS/RCSIS 120**Transfer acceptability:** CSU

Hands-on experience with advanced microcomputer applications featuring the use of word processing, spreadsheet, database and presentation graphics software.

CSIS 127 Word (1)*2 hours lecture/laboratory***Note:** May be taken 2 times**Transfer acceptability:** CSU

This course is intended for individuals seeking the fundamental and advanced skills of Microsoft Word word processing software. It will also prepare individuals who are seeking to become a Microsoft Proficient Specialist and Microsoft Word Expert Specialist.

CSIS 130 Cisco Networking Fundamentals (3)*1½ hours lecture-3 hours lecture/laboratory*

Emphasis on the OSI model and industry standards. Includes network topologies, IP addressing, subnet masks, basic network design and cable installation. This 70 hour course of instruction prepares the student for Cisco certification examination.

CSIS 131 Cisco Router Configuration (3)*1½ hours lecture-3 hours lecture/laboratory***Prerequisite:** CSIS 130

Development of knowledge and skills to install, configure, customize, maintain and troubleshoot Cisco routers and components. This 70 hour course of instruction prepares the student for Cisco certification examination.

CSIS 132 Cisco Advanced Routing and Switching (3)*1½ hours lecture-3 hours lecture/laboratory***Prerequisite:** CSIS 131

Development of knowledge and skills to configure advanced routing protocols, Local Area Networks (LANs), and LAN switching. Design and management of advanced networks. This 70 hour course of instruction prepares the student for Cisco certification examination.

CSIS 133 Cisco Wide Area Network Design and Support (3)*1½ hours lecture-3 hours lecture/laboratory***Prerequisite:** CSIS 132

Development of knowledge and skills to design and configure advanced Wide Area Network (WAN) projects using Cisco IOS command set. This 70 hour course of instruction prepares the student for Cisco certification examination.

CSIS 134 Network Voice and Data Cabling (4)*3 hours lecture-2 hours lecture/laboratory***Prerequisite:** A minimum grade of "C" in CSIS 108 or RCSIS 56 and CSIS 111

The course is designed for students interested in the physical aspects of voice and data network cabling and installation. The course focuses on cabling issues related to data and voice connections and provides an understanding of the industry and its worldwide standards, types of media and cabling, physical and logical networks, as well as signal transmission. It includes network design documentation, part list set up and purchase, pulling and mounting cable, cable management, choosing wiring closets and patch panel installation and termination as well as installing jacks and cable testing. Also included are design documentation, and installation issues, as well as laboratory safety, on-the-job safety, and working effectively in group environments.

CSIS 135 Wireless Networking (2)*4 hours lecture/laboratory*

This course explores the latest wireless technologies in the networking industry, including Bluetooth, SWAP, Wireless LANs, 802.11a and 802.11b, Cellular Telephone, Infrared lasers, Microwave, Spread spectrum, and Satellite. This course also offers important historical coverage of wireless technology to show how we got where we are today and where we can expect to see wireless networks in the future.

CSUS 136 Hacker Prevention/Security (3)*2 hours lecture - 2 hours lecture/lab*

This course offers in-depth analysis and hands-on experience in PC and network security concepts specific to Microsoft, Unix-based and

Cisco systems. The course includes various topics including hacker prevention and intrusion detection, firewall installation and configuration, wireless network security, remote access technologies, internet and intranet security concepts, physical security, disaster recovery, access control lists, identification of malicious code, cryptography and forensics. Students will learn team dynamics in a lab environment, planning, installing and configuring various network security elements regarding hardware, software, and media. The student will understand and be able to demonstrate proper planning and implementation of a secure network and be able to document and offer training to end users, executives, and human resources on the proper maintenance of a secure network.

CSIS 137 Web Site Development with HTML (2)*4 hours lecture/laboratory***Note:** Cross listed as R CSIS 137**Transfer acceptability:** CSU

This course provides a foundation to Internet/Intranet technologies. This course primarily teaches the skills required to develop and publish Web sites utilizing HTML, including using HTML tables, Frames, Web Page Forms, and basic CSS (Cascading Style Sheets).

CSIS 138 JavaScript (3)*2 hours lecture-2 hours lecture/laboratory***Recommended preparation:** CSIS/R CSIS 137**Transfer acceptability:** CSU

Skills required to design Web-based applications using the JavaScript scripting language such as writing small scripts; working with data types; creating interactive forms using various form objects; and using the advanced features of JavaScript including loops, frames and cookies.

CSIS 139 Advanced Web Site Development (3)*2 hours lecture-2 hours lecture/laboratory***Recommended preparation:** CSIS 138**Transfer acceptability:** CSU

This course will focus on web-based application development using advanced features of HTML, Dynamic HTML, XHTML, and XML.

CSIS 145 Introduction to Linux (3)*6 hours lecture/laboratory***Note:** Cross listed as RCSIS 145; graded only**Transfer acceptability:** CSU

An overview of the Linux operating system, utilities, and associated applications for workstations. Includes installation, configuration and troubleshooting of Linux systems within the command-line environment and the graphical X-windows environment.

CSIS 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 115, or a passing grade on the appropriate placement test**Note:** Cross listed as Math 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.

CSIS 160 Survey of Computer Science (4)*3 hours lecture-2 hours lecture/laboratory***Transfer acceptability:** CSU; UC – CSIS 160 and 220 combined: maximum credit, one course

An overview of the discipline of computer science including such topics as the history of computer science; machine architecture; data storage and manipulation; operating software engineering; data structures; database and information retrieval; data communications; artificial intelligence; theory of computation; social legal and ethical issues. Includes hands-on laboratory experience reinforcing the lecture material.

CSIS 162 Windows Client (3)*2 hours lecture-2 hours lecture/laboratory***Prerequisite:** CSIS 108 or RCSIS 155 and CSIS 111**Note:** May be taken 4 times

This course provides students with the knowledge and skills necessary to install and configure Microsoft Windows Client on stand-alone computers and on client computers that are part of a workgroup or a domain.

- CSIS 163 Windows Server** (3)
2 hours lecture-2 hours lecture/laboratory
Prerequisite: CSIS 108 or RCSIS 156 and CSIS 111
Note: May be taken 4 times
 This course provides students with knowledge and skills necessary to install, configure, and administer a Microsoft Windows Server in a Network. Typical network services and applications include file and print, database, messaging, proxy server or firewall, dial-in server, desktop management, and Web hosting.
- CSIS 164 Network Infrastructure Administration** (3)
2 hours lecture -2 hours lecture/laboratory
Prerequisite: CSIS 163
Note: May be taken 4 times
 This course provides students with the knowledge and skills necessary to install, configure, manage, and support a network infrastructure that uses the Microsoft Windows Server products.
- CSIS 165 Active Directory Services Administration** (3)
2 hours lecture-2 hours lecture/laboratory
Prerequisite: CSIS 163
Note: May be taken 4 times
 This course provides students with the knowledge and skills necessary to install, configure, and administer Microsoft Windows Active Directory services. The course also focuses on implementing Group Policy and understanding the Group Policy tasks required to centrally manage users and computers.
- CSIS 166 Designing Active Directory Services** (2)
1½ hours lecture-1 hour lecture/laboratory
Recommended preparation: CSIS 165
 This course provides students with the knowledge and skills necessary to design a Microsoft Windows directory services infrastructure in an enterprise network.
- CSIS 167 Designing Network Infrastructure** (2)
1½ hours lecture-1 hour lecture/laboratory
Recommended preparation: CSIS 164
 This course provides students with the knowledge and skills necessary to design a Microsoft Windows networking services solution for enterprise networks.
- CSIS 168 Designing Network Security** (2)
1½ hours lecture-1 hour lecture/laboratory
Recommended preparation: CSIS 165
 This course provides students with the knowledge and skills necessary to design a security framework for small, medium, and enterprise networks using Microsoft Windows technologies.
- CSIS 170 Windows** (1)
2 hours lecture/laboratory
Note: Cross listed as RCSIS 170
Transfer acceptability: CSU
 Fundamentals of Windows Graphical User Interface. Students will develop proficiency in: changing desktop settings; file/folder management at both desktop and Explorer levels; and basic system maintenance.
- CSIS 172 Microsoft SQL Server Administration** (2)
1½ hours lecture-1 hour lecture/laboratory
Recommended preparation: CSIS 163
 This course provides students with the knowledge and skills necessary to administer and troubleshoot information systems that incorporate Microsoft SQL Server Enterprise Edition.
- CSIS 173 Designing Microsoft SQL Server Databases** (2)
1½ hours lecture-1 hour lecture/laboratory
Recommended preparation: CSIS 196 or 252
 This course provides students with the knowledge and skills necessary to design and implement database solutions by using Microsoft SQL Server Enterprise Edition.
- CSIS 174 Excel** (1)
2 hours lecture/laboratory
Note: May be taken 2 times
Transfer acceptability: CSU
 This course is intended for individuals seeking the fundamental and advanced skills of Microsoft Excel spreadsheet software. It will also prepare individuals who are seeking to become a Microsoft Excel Proficient Specialist and Microsoft Excel Expert Specialist
- CSIS 176 Managing a Windows Network** (2)
1½ hours lecture-1 hour lecture/laboratory
Prerequisite: CSIS 162 and 163
 This course provides students with the knowledge and skills necessary to administer, support, and troubleshoot networks that incorporate Microsoft Windows.
- CSIS 177 Microsoft Exchange Server** (2)
1½ hours lecture-1 hour lecture/laboratory
Prerequisite: CSIS 162 and 163
 This course provides students with the knowledge and skills necessary to implement, administer, and troubleshoot information systems that incorporate Microsoft Exchange Server.
- CSIS 179 Access** (1)
2 hours lecture/laboratory
Note: May be taken 2 times
Transfer acceptability: CSU
 This course is intended for individuals seeking the fundamental and advanced skills of Microsoft Access database software. It will also prepare individuals who are seeking to become a Microsoft Access Proficient Specialist and Microsoft Access Expert Specialist.
- CSIS 185 PowerPoint** (1)
2 hours lecture/laboratory
Note: May be taken 2 times
Transfer acceptability: CSU
 This course is intended for individuals seeking the fundamental and advanced skills of Microsoft PowerPoint graphics software. It will also prepare individuals who are seeking to become a Microsoft PowerPoint Expert Specialist.
- CSIS 188 Outlook** (1)
2 hours lecture/laboratory
Note: May be taken 2 times
Transfer acceptability: CSU
 This course introduces students to the fundamental and advanced skills of Microsoft Outlook software. Will help prepare individuals who are seeking to become a Microsoft Outlook Proficient Specialist and Microsoft Outlook Expert Specialist.
- CSIS 191 PHP with MySQL** (3)
2 hours lecture-2 hours lecture/laboratory
Recommended preparation: CSIS/R CSIS 137
 This course provides students with the knowledge and skills necessary to use the PHP scripting language to develop dynamic Web-based applications. Topics of study include the fundamentals of the scripting, using PHP with HTML forms, creating functions, and integrating with databases using MySQL.
- CSIS 194 Perl and CGI Scripting** (3)
2 hours lecture-2 hours lecture/laboratory
Recommended preparation: CSIS/R CSIS 137
Transfer acceptability: CSU
 This course develops basic competency in the Perl programming language. It focuses on using Perl to developing web-based Internet and Intranet applications. Topics of study include Perl for UNIX, Perl for Win32, CGI standards, HTML forms, scalar and array variables, control structures, file I/O, regular expressions and subroutines.
- CSIS 195 Python Programming** (3)
2 hours lecture-2 hours lecture/laboratory
Recommended preparation: CSIS/R CSIS 137
 This course provides students with the knowledge and skills necessary to use the Python programming language to develop software for Internet applications, perform systems programming, and implement user interfaces. Topics of study include the fundamentals of the language, parallel system tools, system tools, graphical user interfaces, network scripting, client-side scripting, and server-side scripting. Also covered are databases and persistence, and data structures.
- CSIS 196 Introduction to SQL** (3)
2 hours lecture-2 hours lecture/laboratory
Transfer acceptability: CSU
 Intended for individuals who want to learn how to search for and manipulate data in a database, create tables and indexes, handle

security, control transaction processing, and learn the basics of how to design a database.

CSIS 197 Computer Science and Information Systems 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 Computer Information Systems. See class schedule for specific topic covered. Course title will designate subject covered.

CSIS 197B Computer Science and Information Systems Topics in Microsoft Office (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 Microsoft Office to include Word, Excel, Access, PowerPoint, and Outlook. See Class Schedule for specific topic offered. Course title will designate subject covered.

CSIS 214 Intermediate Visual Basic (4)

3 hours lecture-2 hours lecture/laboratory

Prerequisite: CSIS 117

Transfer acceptability: CSU

An intermediate level programming language which provides for building special purpose Windows applications using the Graphical User Interface of Windows. Includes extensive practice using programming logic control structures in designing algorithms and a wide array of Visual Basic objects in implementing the three-step approach to building Windows applications in Visual Basic.

CSIS 217 Advanced Visual Basic (4)

3 hours lecture-2 hours lecture/laboratory

Prerequisite: CSIS 214

Transfer acceptability: CSU

Advanced course in Visual Basic programming. Special emphasis will be placed on the application of the Visual Basic language to solve business problems including requirements definition, design, construction, testing, and documentation. Multiple forms, objects, controls, object linking and embedding (OLE), and the use of the data control object to interface with databases external to Visual Basic will be covered.

CSIS 218 Visual Basic for Applications (2)

4 hours lecture/laboratory

Prerequisite: CSIS 217

Transfer acceptability: CSU

This course is designed to apply skills developed in previous Microsoft Office and Visual Basic programming classes. Includes learning the Visual Basic for Applications model to programmatically create integrated Microsoft Word and Excel applications.

CSIS 220 Programming for Computer Science (4)

3 hours lecture-2 hours lecture/laboratory

Prerequisite: CSIS 160

Transfer acceptability: CSU; UC; CAN CSIS 12

Introduces object-oriented programming and design using Java. Focuses on implementation and testing of software in a platform-independent, event-driven, graphical user interface environment. Covers basic concepts of data representation, user interface design, and software engineering.

CSIS 221 Data Structures (4.5)

3 hours lecture-3 hours lecture/laboratory

Prerequisite: CSIS 220

Transfer acceptability: CSU; UC

Focus on object-oriented programming and its principles of objects, classes, encapsulation, inheritance, graphical user interface, and its relationship to the Java programming language. Introduction to the principles of modularity, data abstraction, abstract data types as they apply to various data structures. Focus on the definition, implementation, and applications of the basic data structures and associated operators that are found in computer science. These include arrays, stacks, recursion, queues, lists, tables, references,

trees, sorting, searching, event-driven structures that support the development of graphical user interfaces. Includes hands-on laboratory experience reinforcing the lecture material.

CSIS 222 Machine Organization and Assembler Language (4)

3 hours lecture-2 hours lecture/laboratory

Prerequisite: CSIS 220 or 235

Transfer acceptability: CSU; UC

An introduction to Assembler Language programming. Language syntax is covered, together with a study of the instruction set mnemonics, segment, index, pointer, general purpose and flag registers. A variety of memory addressing techniques will be covered, as well as stack operations, particularly those associated with passing parameters to subroutine calls. The course will also include I/O to screen, printer, and disk interfaces. Emphasis will be placed on interaction between the student's code and the operating system's supplied functions for I/O to peripheral devices. Use of editor and debugging tools will also be addressed.

CSIS 225 Linux Fundamentals (2)

4 hours lecture/laboratory

Transfer acceptability: CSU

A hands-on introduction to a computer operating system including operating system terminology, E-mail user utilities, file structure, file security, and an introduction to shell programming using the Bourne shell.

CSIS 226 Linux Shell Scripting (2)

4 hours lecture/laboratory

Prerequisite: CSIS 225

Transfer acceptability: CSU

Intermediate concepts of shell script programming, advanced utilities, file management, and alternative editors. Includes usage of sed (stream editor), awk (a UNIX scripting language), and graphical user interfaces. Introduction to UNIX networking concepts.

CSIS 227 Linux Administration (2)

4 hours lecture/laboratory

Prerequisite: CSIS 225

Transfer acceptability: CSU

A hands-on/theory introduction to UNIX System Administration including system start-up and shutdown, administration files, system security, backup procedures, and user registration. Course will cover terminal and printer administration.

CSIS 228 Linux Networking and Security (2)

4 hours lecture/laboratory

Prerequisite: CSIS 227

Transfer acceptability: CSU

A hands-on introduction to important administration activities required to manage a Linux network configuration. Course will cover topics configuring TCP/IP, DNS, PPP, send mail, Apache Web Server and the firewall.

CSIS 229 Windows System Administration (2)

2 hours lecture-2 hours laboratory

Prerequisite: CSIS/R CSIS 170

Transfer acceptability: CSU

This course is an introduction to system administration for the Windows operating system.

CSIS 235 C for Programmers (4)

3 hours lecture-2 hours lecture/laboratory

Note: Not recommended for students who have completed CSIS 220 in C

Transfer acceptability: CSU; UC

Intended for students with high-level programming language experience. An introduction to the C programming language emphasizing top down design and principles of structured programming. Includes hands-on laboratory experience reinforcing the lecture material. Language syntax is covered, together with variations in standard control structures, data structures, pointers, function declarations, and file input/output. The use of header files and processor directives will be covered. Development and maintenance function libraries will be included.

CSIS 240 Video Game Programming (4)

3 hours lecture-2 hours lecture/laboratory

Prerequisite: CSIS 235 or 280

Note: May be taken 4 times

Transfer acceptability: CSU

Introduction to the programming of video games. Course will explore use of video game engines and how to write a video game as a C application that makes calls to the engine. Additional topics will focus on efficient utilization of variables and data structures, run-time optimization, real-time debugging, version control maintenance, and management of bug lists. Includes hands-on laboratory experience reinforcing the lecture, text, and course materials.

CSIS 241 Overview of the Video Game Industry (4)

4 hours lecture

Survey of the historical, technological, business, social and psychological aspects of the video game industry. Intended for those considering a career in the video game industry, or those with a strong interest in video games and how they are made.

CSIS 242 Game Design (4)

4 hours lecture

An introduction to video game design, including the study of various genres of games, and the preparation of a game design document. Intended for those considering a career in the video game industry, or those with a strong interest in video games and how they are made.

CSIS 245 Systems Analysis and Design (4)

3 hours lecture-2 hours lecture/laboratory

Prerequisite: CSIS 117 or 220 or 235

Transfer acceptability: CSU; UC

Specific projects, problems, and systems. Application of appropriate programming languages and the use of analytical tools in solving case studies and problems.

CSIS 252 Introduction to Oracle (3)

2 hours lecture-2 hours lecture/laboratory

Transfer acceptability: CSU

An introduction to relational database concepts including the design and creation of database structures to store, retrieve, update and display data.

CSIS 254 Oracle Database Design (3)

2 hours lecture-2 hours lecture/laboratory

Prerequisite: CSIS 252

Transfer acceptability: CSU

A top-down, systematic approach to the development of Oracle relational databases.

CSIS 256 Oracle Database Administration I (3)

2 hours lecture-2 hours lecture/laboratory

Prerequisite: CSIS 252

Transfer acceptability: CSU

Student will learn how to design, create, and maintain an Oracle database. Students will gain a conceptual understanding of the Oracle database architecture and how its components work and interact with one another. Students will also learn how to create an operational database and properly manage the various structures in an effective and efficient manner. The lesson topics are reinforced with structured hands-on practices.

CSIS 257 Database Administration II (3)

2 hours lecture-2 hours lecture/laboratory

Prerequisite: CSIS 256

Students will learn about transporting data between databases and the utilities to perform these activities. Students are also introduced to networking concepts and configuration parameters, as well as how to solve some common network problems. In hands-on exercises, students configure network parameters so that database clients and tools can communicate with the Oracle database server. This course also addresses backup and recover techniques, and examines various backup, failure, restore and recovery scenarios. Students also examine backup methodologies based on business requirements in a mission critical enterprise. Students use multiple strategies and Oracle Recover Manager to perform backups, and restore and recover operations.

CSIS 258 Database Performance Tuning (3)

2 hours lecture-2 hours lecture/laboratory

Prerequisite: CSIS 257

Student will be introduced to the importance of good initial database design and the method used to tune a production Oracle 9i database.

The focus is on database and instance tuning rather than specific operating system performance issues. Students will gain practical experience tuning an Oracle database. Students will learn how to recognize, troubleshoot and resolve common performance related problems in administering an Oracle database.

CSIS 259 Oracle PL/SQL Programming (2)

2 hours lecture-2 hours lecture/laboratory

Prerequisite: CSIS 252

Student will learn the Oracle PL/SQL language, a flexible procedural extension to SQL, increases productivity, performance, scalability, portability and security. Student will use PL/SQL's tight integration with Oracle database that allows application developers to build and deploy distributed applications with considerable flexibility. In this course you learn how to utilize advanced techniques to design PL/SQL applications to solve complex business problems.

CSIS 264 TCP/IP Internet Architecture and Protocols (2)

2 hours lecture-2 hours laboratory

Note: May be taken 2 times

This course will focus on the basic concepts and architecture of Transmission Control Protocol/Internet Protocol (TCP/IP). Topics covered will include an overview of TCP/IP, LAN technologies, packet networks, IP addressing, Control Protocol/Internet Protocol (TCP/IP), Transport Layer, Gateway, Routing, Application Layer Protocols, Internet Mail Protocols, how TCP/IP works with LAN and WAN protocols, the Domain Name Service (DNS), Network File System (NFS), Network Information Systems (NIS), and managing TCP/IP.

CSIS 266 Implementing and Administering Web Servers (2.5)

2 hours lecture-1½ hours laboratory

Recommended preparation: CSIS 163

Explores issues dealing with building and managing a web server. Topics will include web server and network issues, TCP/IP connectivity, server setup, web site administration, security, Internet commerce, and the function of the Webmaster.

CSIS 267 SQL Server (2)

2 hours lecture-2 hours laboratory (2)

Prerequisite: CSIS 196 and 264

This course provides training to students who are interested in administering and implementing Microsoft SQL Server.

CSIS 268 Active Server Pages (3)

2 hours lecture-2 hours lecture/laboratory

Prerequisite: CSIS/RCSIS 137

Transfer acceptability: CSU

This course presents an introduction to the technologies and features in Active Server Pages. Topics include: introduction to ASP, Webforms, controls, events, validation, custom controls, data binding, and various methods of code reuse, state management, configuration, caching, and application deployment.

CSIS 269 Web Security and E-Commerce (2)

2 hours lecture-2 hours laboratory

Transfer acceptability: CSU

Prerequisite: CSIS 264

This course provides an introduction to the technology that supports E-Commerce and web security.

CSIS 272 Java Programming for Information Systems (3)

2 hours lecture-2 hours lecture/laboratory

Recommended preparation: CSIS 117 or 138

Transfer acceptability: CSU

An introduction to Java programming with emphasis on the syntax and structure of the Java language. Specific topics will include data types, exception handling, object-oriented programming, multi-threaded programming, event-driven programming and an introduction to Java Servlets and JSPs.

CSIS 273 Java Servlets and JSPs (3)

2 hours lecture-2 hours lecture/laboratory

Recommended preparation: CSIS 272

This course provides students with the knowledge and skills necessary to perform server-side Java programming using Servlets and JSPs, HTML form data, Session Tracking, Cookies, JSP scripting

elements, including Applets in JSP documents, using JavaBeans with JSP, and creating custom JSP Tag libraries.

CSIS 280 C++ and Object-Oriented Programming (4)

3 hours lecture-2 hours lecture/laboratory

Prerequisite: CSIS 221 or CSIS 235

Transfer acceptability: CSU; UC

Detailed study of the C++ programming language and its support for data abstraction and object-oriented programming. Presents an introduction to the fundamental elements of object-oriented programming including encapsulation, classes, inheritance, polymorphism, templates, and exceptions.

CSIS 282 C# Programming (3)

2 hours lecture-2 hours lecture/laboratory

Recommended preparation: CSIS/R CSIS 137

Transfer acceptability: CSU

This course provides students with the knowledge and skills necessary to use the C# programming language in the .NET Framework, build both server-side programs and with Windows applications, accessing data with ADO.NET, use C# with Web Forms and using C# with the .NET CLR.

CSIS 285 Windows Programming I (4)

3 hours lecture-2 hours lecture/laboratory

Prerequisite: CSIS 221

Transfer acceptability: CSU

An introduction to the fundamental concepts of Windows programming which will enable students to develop Windows applications using a graphical user interface. Includes a detailed study of the Windows Application Programming Interface.

CSIS 288 Windows Programming II (3)

3 hours lecture-2 hours laboratory

Prerequisite: CSIS 280 and 285

Transfer acceptability: CSU

Windows programming using the WIN32 API for writing applications that use multitasking, threads, synchronization, and structured exception handling. Covers implementation of Dynamic Link Libraries (DLLs), Graphic Device Interface (GDI) optimization, and creation of Help files. Includes a detailed study of the Microsoft Foundation Class (MFC) Library. Presents techniques to add Object Linking and Embedding (OLE) functionality to Windows applications.

CSIS 294 Enterprise JavaBeans and J2EE (3)

2 hours lecture-2 hours lecture/laboratory

Recommended preparation: CSIS 273

Transfer acceptability: CSU

This course provides students with the knowledge and skills necessary to code and deploy Enterprise JavaBeans (EJBs), how to use JDBC with EJBs, Servlets and EJBs working together and the Java Naming and Directory Interface (JNDI).

CSIS 295 Directed Study in Computer Science and Information Systems (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 for a maximum of 6 units

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

Designed for the student who has demonstrated a proficiency in computer science subjects and the initiative to work independently on a particular sustained project which does not fit into the context of regularly scheduled classes.

Construction Inspection (CI)

Contact Occupational & Noncredit Programs for further information, (760) 744-1150, ext. 2284

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

Construction Inspection

Prepares students for a career as Building Construction Inspectors, or upgrades skills necessary for employment in the building construction trades.

A.A. Degree Major or Certificate of Achievement

Program Requirements	Units
CI 89 Plumbing Codes	2.5
CI 90 Mechanical Codes	2.5
CI 100 Building Codes I	3
CI 101 Building Codes II	3
CI 105 Electrical Codes I	3
CI 106 Electrical Codes II	3
CI 115 Nonstructural Plan Review	3
CI 120 Structural Plan Review	3
CI 125 Plan Reading	3
TOTAL UNITS	26

COURSE OFFERINGS

Courses numbered under 100 are not intended for transfer credit.

CI 89 Plumbing Codes (2.5)

2 ½ hours lecture

Note: May be taken 2 times

An in-depth study of the fundamental concepts and interpretations of current state adopted plumbing codes. Topics covered include compliance issues, plumbing specifications, basic plumbing principles, and inspection methods and techniques. International Conference of Building Officials (ICBO) revisions every three years.

CI 90 Mechanical Codes (2.5)

2 ½ hours lecture

Note: May be taken 2 times

An in-depth study of the fundamental concepts and interpretations of current state adopted mechanical codes. Topics covered include compliance issues, mechanical specifications, basic mechanical principles, and inspection methods and techniques. International Conference of Building Officials (ICBO) revisions every three years.

CI 100 Building Codes I (3)

3 hours lecture

Note: May be taken 2 times

Introduction to building code requirements with an emphasis on minimum construction standards and code enforcement. Code requirements controlling the design, construction, quality of materials, use, occupancy and location of all buildings are evaluated. Revisions to the Uniform Building Code are every three years.

CI 101 Building Codes II (3)

3 hours lecture

Note: May be taken 2 times

A study of the requirements and standards for code enforcement and inspection. Interpretation is based on the International Conference of Building Officials (ICBO) manual which is revised every three years.

CI 105 Electrical Codes I (3)

3 hours lecture

Note: May be taken 2 times

The basic rules pertaining to electrical installations for light, heat, and power in residential, commercial, and industrial applications. National Fire Protection Association (NFPA).

CI 106 Electrical Codes II (3)

3 hours lecture

Note: May be taken 2 times

Prerequisite: CI 105

A continuation of Electrical Codes I. National Fire Protection Association (NFPA) revisions every three years.

CI 115 Nonstructural Plan Review (3)

3 hours lecture

Prerequisite: CI 100

Note: May be taken 2 times

A study of basic methods used by plans examiners to check the nonstructural details of construction drawings in compliance with the uniform building code. Topics cover analyzing nonstructural details and determining compliance with the minimum requirements for concrete, masonry, wood, and steel structures.

CI 120 Structural Plan Review (3)

3 hours lecture

Prerequisite: CI 100

Note: May be taken 2 times

Provides inspectors, contractors, and building department technicians with the basic methods used for structural review of plans for code compliance required before permits can be issued. The structural provisions of the Uniform Building Code will be studied and applied to typical residential and low-rise construction plan examples. The role and responsibilities of the plan check technician in his or her job performance will be defined according to public needs, industry practice, and the Professional Engineers Act.

CI 125 Plan Reading (3)

3 hours lecture

Prerequisite: CI 100

How to read construction drawings and how to establish a systematic method of reviewing plans for compliance with the Uniform Building Code.

CI 197 Construction Inspection Topics (.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

Topics in Construction Inspection. May be repeated with new subject matter. See Class Schedule for specific topic offered. Course title will designate subject covered.

Construction Technology (CT)

Contact Occupational & Noncredit Programs for further information, (760) 744-1150, ext. 2284

COURSE OFFERINGS

Courses numbered under 100 are not intended for transfer credit.

CT 97 Construction Technology Topics (.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

Topics in Construction Technology. May be repeated with new subject matter. See Class Schedule for specific topic offered. Course title will designate subject covered.

Cooperative Education (CE)

Contact the Cooperative Education Department for further information, (760) 744-1150, ext. 2354

General Cooperative Work Experience

The General Cooperative Work Experience Education Program is designed to give job information and experience to those

students employed in jobs not related to coursework in school. Employment may be on or off campus; the student may or may not receive pay depending on where the work is performed. The Cooperative Education Coordinator will assist students in obtaining jobs.

STUDENT QUALIFICATIONS: In order to participate in Cooperative Work Experience Education students shall meet the following requirements:

1. Complete no less than seven units (summer session, one course) including Cooperative Work Experience Education.
2. Have approval of the Cooperative Work Experience Education Coordinator.
3. Have occupational or education goals to which, in the opinion of the Coordinator, the Cooperative Work Experience Education will contribute.
4. Pursue a planned program of Cooperative Work Experience Education which, in the opinion of the Coordinator, includes new or expanded responsibilities or learning opportunities beyond those experienced during the previous employment.

The number of units received each semester for on-the-job experience will be based on the total number of hours worked each semester or summer session as follows:

- 1 unit - 75 hours per semester or session
- 2 units - 150 hours per semester or session

A maximum of six units may be earned in general cooperative work experience, not to exceed three units each semester. In addition to the hours worked, a student must attend a coordinating class. Topics of discussion in the class include choice of occupation, employee information, job application, human relations, and appearance and personality development as related to employment in the vocational field.

Occupational Cooperative Work Experience

The Occupational Cooperative Work Experience Program is designed to coordinate on-the-job training and classroom instruction. Supervised employment is related to the occupational goal of the individual student. Employment may be on or off campus; the student may or may not receive pay, depending on where the work is performed. The Cooperative Education Coordinator will assist students in obtaining jobs.

STUDENT QUALIFICATIONS: In order to participate in cooperative work experience education students shall meet the following requirements:

1. Be a legally indentured or certified apprentice.
OR
2. Complete no less than seven units (summer session, one course) including cooperative work experience education.
OR
3. While working on the alternate semester plan must have completed 12 units. Six units may be earned during regular or summer session.
AND
4. Have approval of the Cooperative Work Experience Education Coordinator.
5. Have occupational or education goals to which, in the opinion of the Coordinator, the cooperative work experience education will contribute.
6. Pursue a planned program of cooperative work experience education which, in the opinion of the Coordinator, includes new or expanded responsibilities or learning opportunities beyond those experienced during the previous employment.

The number of units received each semester for on-the-job experience will be based on the total number of hours worked each semester or summer session as follows:

- 1 unit - 75 hours per semester or session
- 2 units - 150 hours per semester or session
- 3 units - 225 hours per semester or session
- 4 units - 300 hours per semester or session

A maximum of sixteen units may be earned in occupational cooperative work experience, not to exceed four units each semester.

COURSE OFFERINGS

CE 100 Cooperative Education (1,2,3,4)

Transfer acceptability: CSU

Supervised on-the-job training for all occupational students.

CE 105 Job Hunting Techniques (1,2,3)

1, 2 or 3 hours lecture

Transfer acceptability: CSU

Comprises the changing work ethic, updated labor market information, sources of job leads, job opportunities, job search, resume preparation, development of confidence and sound communication skills, interviewing techniques, attitudinal and motivational behavior necessary during the job campaign, job hunting techniques, and related topics.

CE 110 Cooperative Education – General (2,3)

Supervised on-the-job training for all students.

CE 150 Cooperative Education Internship (2-3)

10-15 hours laboratory

Note: May be taken 4 times

Transfer acceptability: CSU

Students learn major-specific knowledge and skills at an internship site that will enhance employment. Students design and complete an internship project in consultation with their internship advisor and job site supervisor.

CE 197 Cooperative Education 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 Cooperative Education. See Class Schedule for specific topic offered. Course title will designate subject covered.

Counseling (COUN)

See also Disabled Resource

Contact the Counseling Department for further information, (760) 744-1150, ext. 2179

COURSE OFFERINGS

Courses numbered under 50 are non-degree courses.

Courses numbered under 100 are not intended for transfer credit.

COUN 45 Basic Study Skills (1)

1 hour lecture

Note: Open entry/Open exit; Credit/No Credit grading only

Study improvement techniques, time management techniques, memory and note taking skills, and test taking methods.

COUN 48 Overcoming Test Anxiety (1)

2 hours lecture/laboratory

Note: Open entry/Open exit; Credit/No Credit grading only

Provides instruction in understanding the sources of test anxiety and the techniques for overcoming it.

COUN 49 Introduction to Financial and Academic Resources (.5)*½ hour lecture***Note:** Credit/No Credit grading only

Survey of financial and supportive resources available to students including part-time employment. The course content includes an overview of financial aid programs and eligibility requirements, campus support programs, community support services, money management, and educational planning. This course may be used to fulfill the financial aid orientation requirement.

COUN 100 Introduction to Basic Counseling Skills (3)*3 hours lecture***Transfer acceptability:** CSU

An introduction to the principles and practices of counseling and interviewing. A systematic development of the basic skills essential for effective counseling. Combines informal lecture, videotapes, and role playing interactions. Practicum experience will be required.

COUN 101 Transfer Success (1)*1 hour lecture***Note:** Credit/No Credit grading only**Transfer acceptability:** CSU

Introduction to the transfer research process designed for planning long term educational and career goals. Students learn how to evaluate universities, and learn specific transfer requirements. Student will research degrees, housing, financial aid, scholarships and supportive services.

COUN 110 College Success Skills (3)*3 hours lecture***Transfer acceptability:** CSU

Provides students with the skills and knowledge necessary to reach their educational objectives. Topics covered include motivation and self-discipline, memory techniques, time management, communication and relationship skills, career planning, critical thinking and personal issues. This course will include an understanding of diversity and socioeconomic differences from a historical and modern day perspective. This course is recommended for new and re-entry students.

COUN 115 Career/Life Planning (3)*3 hours lecture***Note:** May be offered on educational television**Transfer acceptability:** CSU

A course designed to motivate the student to take responsibility for the management of his/her life, recognizing the values of planning as a means of coping with uncertainty, and relating work effectively to one's own life.

COUN 120 Quest for Identity and Life Skills (3)*3 hours lecture***Transfer acceptability:** CSU

An exploration of the dynamics involved in the development of the individual in the search for identity and self-discovery. Specific emphasis will be placed on the decision-making process particularly as it relates to the individual's own humanness, value system, and unique functioning. Emphasis will also be placed on the role of culture and a set of life skills that will serve to empower one's identity and understanding of self. Examples of life skills include coping with the physiological effects of stress and anxiety, goal setting, emotional development, problem solving, critical thinking skills, creative self-expression, self-esteem, and interpersonal communication.

COUN 165 Career Search (1)*2 hours lecture/ laboratory***Note:** Open entry/Open exit; Credit/No Credit grading only**Transfer acceptability:** CSU

Designed to assist students in selecting a career goal. This will be accomplished by identifying the students' career interests, personality type, work values, and transferable skills as they relate to occupations.

COUN 170 Major Search (1)*1 hour lecture***Note:** Open entry/Open exit; Credit/No Credit grading only**Transfer acceptability:** CSU

This course is designed to assist students to select a major goal and create an educational plan. This will be done by identifying academic interests and through researching career options.

COUN 180 Orientation for International Students (1)*1 hour lecture***Note:** Credit/No Credit grading only**Transfer acceptability:** CSU

Orientation for International Students will explore college life and concerns related to cultural and adjustment issues while living in the United States.

COUN 185 Peer Advising (1)*1 hour lecture***Note:** Credit/No Credit grading only**Transfer acceptability:** CSU

This class will teach students how to utilize and provide information from the Palomar College catalog, class schedule, student services, and community resources. Topics covered will be: academic policies, interpersonal communication skills, and peer counseling techniques. This course is required for participation in the Palomar Peer Counselor Program.

COUN 197 Counseling 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: Credit/No Credit grading only; may be taken 4 times**Transfer acceptability:** CSU

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

Culinary Arts (CUL)

See also ROP Culinary Arts

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

Culinary Arts

Prepares students for employment and career opportunities in various areas of the foodservice industry. The focus is on food preparation and production skills, with supporting coursework in nutrition, food sanitation and safety, menu planning, purchasing and inventory control, kitchen management and employee supervision. Practical hands-on lab activities in a commercial kitchen environment and directed workplace learning opportunities prepare students for foodservice positions in resorts, casinos, and fine dining establishments.

Students will need to possess a current San Diego County Food Handler Card to participate in kitchen/lab activities.

In order to earn a certificate or degree, students must achieve a minimum grade of "C" in each of the certificate program courses.

A.A. Degree Major or Certificate of Achievement*

Program Requirements		Units
FCS/		
MICR 110	Microbiology and Foods	3
FCS/HE 165	Fundamentals of Nutrition	3
R CUL/		
CUL 110	Culinary Essentials I	3
R CUL/		
CUL 111	Culinary Essentials II	3
R CUL/		
CUL 120	Patisserie and Baking I	3
R CUL/		
CUL 121	Patisserie and Baking II	3
R CUL/		
CUL 130	Pantry/Garde Manger	3
R CSIS/		
CSIS 120	Microcomputer Applications	3

R CUL/ CUL 200	Menu Planning and Purchasing	2
R CUL/ CUL 210	Foodservice Management	3
R CUL/ CUL 220	Catering and Event Planning	3
R CUL/ CUL 298	Culinary Directed Practice I	3
R CUL/ CUL 299	Culinary Directed Practice II	3

Electives (Select a minimum of 3 units)

R CUL/ CUL 115	Dining Room Service	2
R CUL/ CUL 150	International Cuisine	3
R CUL/ CUL 230	Adv Garde Manger/Competition	3
R CUL/ CUL 240	Wines and Affinities	1
TOTAL UNITS		41

Culinary Skills

With a focus on basic food preparation and production skills, nutrition, and food safety and sanitation, the program prepares students for various entry-level positions in the foodservice industry. Practical hands-on lab activities in a modern commercial kitchen environment provide opportunities for students to master the skills required for employment.

Students will need to possess a current San Diego County Food Handler Card to participate in required kitchen/lab activities.

In order to earn a certificate, students must achieve a minimum grade of "C" in each of the certificate program courses.

Certificate of Proficiency

Program Requirements		Units
FCS/ MICR 110	Microbiology and Foods	3
FCS/HE 165	Fundamentals of Nutrition	3
R CUL/ CUL 110	Culinary Essentials I	3
R CUL/ CUL 111	Culinary Essentials II	3
R CUL/ CUL 130	Pantry/Garde Manger	3
R CUL/ CUL 115	Dining Room Service	2
TOTAL UNITS		17

Patisserie and Baking

With a focus on commercial baking and pastry making, the program prepares students for entry-level positions in bakeries, restaurants, resorts and casino operations. Practical hands-on lab activities in a modern commercial kitchen environment provide opportunities for students to master the skills required for employment.

Students will need to possess a current San Diego County Food Handler Card to participate in required kitchen/lab activities.

In order to earn a certificate, students must achieve a minimum grade of "C" in each of the certificate program courses.

Certificate of Proficiency

Program Requirements		Units
FCS/ MICR 110	Microbiology and Foods	3
FCS/HE 165	Fundamentals of Nutrition	3
R CUL/ CUL 120	Patisserie and Baking I	3
R CUL/ CUL 121	Patisserie and Baking II	3
TOTAL UNITS		12

COURSE OFFERINGS**CUL 110 Culinary Essentials I (3)**

1 hour lecture - 4 hours lecture/laboratory

Prerequisite: Current San Diego County Food Handler Card

Recommended preparation: FCS 110/MICR 110

Note: Cross listed as R CUL 110; graded only

Introduction to culinary arts and the foodservice industry. Fundamentals of food preparation and production, emphasizing industry standards. Lab work will focus on knife skills, standard cuts, and preparation of vegetables and starches. Students will be expected to meet high standards of professionalism, sanitation and work habits.

CUL 111 Culinary Essentials II (3)

1 hour lecture - 4 hours lecture/laboratory

Prerequisite: R CUL/CUL 110

Note: Cross listed as R CUL 111; graded only

Advanced food production, including meat and protein fabrication. Lab work will include: stocks, sauces and soups; meat and game; poultry; fish and seafood; breakfast foods and classical cuisine. Students will be expected to meet high standards of professionalism, sanitation and work habits.

CUL 115 Dining Room Service (2)

4 hours lecture/laboratory

Prerequisite: Current San Diego County Food Handler Card

Note: Cross listed as R CUL 115; graded only

Orientation to dining room operations with an emphasis on dining room service, techniques of table waiting, and dining room skills. Students will be expected to meet high standards of professionalism, sanitation and work habits.

CUL 120 Patisserie and Baking I (3)

1 hour lecture - 4 hours lecture/laboratory

Prerequisite: Current San Diego County Food Handler Card

Recommended Preparation: FCS/MICR 110

Note: Cross listed as R CUL 120; graded only

Fundamentals of baking, including ingredient properties and function, and preparation and evaluation of a variety of yeast products, quick breads, cookies, cakes, pies and pastries. Students will be expected to meet high standards of professionalism, sanitation and work habits.

CUL 121 Patisserie and Baking II (3)

1 hour lecture - 4 hours lecture/laboratory

Prerequisite: R CUL/CUL 120

Note: Cross listed as R CUL 121; graded only

Advanced skills in the art of patisserie. Includes: classic pastries, pâte à choux and meringues; plated desserts; cake decorating; chocolate and sugar techniques. Students will be expected to meet high standards of professionalism, sanitation and work habits.

CUL 130 Pantry/Garde Manger (3)

1 hour lecture - 4 hours lecture/laboratory

Prerequisite: San Diego County Food Handler Card

Recommended Preparation: R CUL/CUL 110

Note: Cross listed as R CUL 130; graded only

Introduction to cold food preparation and display. Includes salads, dressings, sandwiches and canapés. Students will be expected to meet high standards of professionalism, sanitation and work habits.

CUL 150 International Cuisine**(3)***1 hour lecture - 4 hours lecture/laboratory***Prerequisite:** *Current San Diego County Food Handler Card***Note:** *Cross listed as R CUL 150; graded only*

A hands-on cooking, tasting and evaluating exploration of the major cuisines of the world. Includes Asian, Latin, European and American cuisines with a focus on the cultures that influenced their development. Students will be expected to meet high standards of professionalism, sanitation and work habits.

CUL 200 Menu Planning and Purchasing**(2)***2 hours lecture***Prerequisite:** *R CUL/CUL 111 and FCS 165/HE 165 and R CSIS/CSIS 120***Note:** *Cross listed as R CUL 200; graded only*

Basic principles of menu planning and purchasing with emphasis on: menu design; specifications and pricing; purchasing, inventory control and storeroom operations; and food and beverage cost control. Includes spreadsheet and database applications. Students will be expected to meet high standards of professionalism and work habits.

CUL 210 Foodservice Management**(3)***3 hours lecture***Prerequisite:** *R CUL/CUL 111***Note:** *Cross listed as R CUL 210; graded only*

Introduction to foodservice management with emphasis on human relations and employee development. Includes operational planning and coordination, problem-solving and decision-making, and personnel management. Students will be expected to meet high standards of professionalism and work habits.

CUL 220 Catering and Event Planning**(3)***1 hour lecture - 4 hours lecture/laboratory***Prerequisite:** *R CUL/CUL 111 and R CUL/CUL 130***Note:** *Cross listed as R CUL 220; graded only*

Fundamentals of catering, including event planning, menu development and banquet preparation. Includes opportunities to apply culinary theory and skills in actual practice. Students will be expected to meet high standards of professionalism, sanitation and work habits.

CUL 230 Adv Garde Manger/Competition**(3)***1 hour lecture - 4 hours lecture/laboratory***Prerequisite:** *R CUL/CUL 111 and R CUL/CUL 130***Note:** *Cross listed as R CUL 230; graded only*

Application of advanced garde manger techniques in practical situations and culinary competition. Includes classical buffet presentation, decorative displays and artistic centerpieces. Students will be expected to meet high standards of professionalism, sanitation and work habits.

CUL 240 Wines and Affinities**(1)***1 hour lecture***Prerequisite:** *R CUL/CUL 111***Note:** *Cross listed as R CUL 240; graded only*

Classification and identification of wines, with emphasis on properties and affinities with food. Includes wines from various regions of the world. Students will be expected to meet high standards of professionalism and work habits.

CUL 298 Culinary Directed Practice I**(3)***3 hours lecture - 10 hours lab***Prerequisite:** *R CUL/CUL 111 and R CUL/CUL 130 or R CUL/CUL 121***Note:** *Cross listed as R CUL 298; graded only*

Directed learning opportunity for culinary arts students to increase their knowledge and skill in the areas of hot and cold food production through supervised on-the-job training. Students will be expected to follow Culinary Arts standards of professionalism. Current San Diego County Food Handler Card and TB clearance required.

CUL 299 Culinary Directed Practice II**(3)***3 hours lecture-10 hours lab***Prerequisite:** *RCUL/CUL 298, R CUL/CUL 200, FCS/MICR 110 and FCS/HE 165***Note:** *Cross listed as R CUL 299; graded only*

Directed entry-level professional work experience in the foodservice industry that provides exposure to the foodservice industry and an opportunity for culinary arts students to practice and demonstrate their employability skills and reflect on their future roles in the industry. Students will be expected to follow Culinary Arts standards of

professionalism. Current San Diego County Food Handler Card and TB clearance required.

Dance (DNCE)

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.

PROGRAMS OF STUDY

Dance

Provides student with background to begin upper division work leading to a B.A. or B.F.A. in dance, or for continued training leading to a professional career in the field of dance and dance-related professions. Prepares student in basic skills necessary for involvement in community dance activities, such as teaching in recreation centers, YMCA's or YWCA's, private studios; performing or choreographing for community theatre productions. Transfer students should consult the four-year college or university catalog for specific requirements or see a Palomar College counselor.

A.A. Degree Major or Certificate of Achievement

Program Requirements	Units
DNCE 100* Survey of Dance	3

Two courses selected from the following classes:

DNCE 101	Survey of World Dance	3
DNCE 105	Introduction to Dance History	3
DNCE 184	Introduction to Kinesiology	3

Three courses selected from the following classes:

DNCE 115	Fundamentals of Ballet	1.5
DNCE 116	Ballet I	1.5
DNCE 210	Ballet II	1.5,2.5
DNCE 211	Pointe/Pas de Deux	1.5,2.5

Two courses selected from the following classes:

DNCE 110	Modern Dance I	1.5
DNCE 111	Modern Dance II	1.5
DNCE 205	Modern Dance III	1,1.5
DNCE 206	Advanced Movement Patterns	1,1.5

Two courses selected from the following classes:

DNCE 120	Jazz Technique I	1.5
DNCE 121	Jazz Technique II	1.5
DNCE 215	Jazz Technique III	1,1.5
DNCE 216	Advanced Dance Technique	1,1.5

One course selected from the following classes:

DNCE 125	Theatre Dance I	1,1.5
DNCE 126	Theatre Dance II	1,1.5
DNCE 130	Tap Dance I	1,1.5
DNCE 131	Tap Dance II	1,1.5
DNCE 132	Tap Dance III	1,1.5

One course selected from the following classes:

DNCE 140	Dance Improvisation I	2
DNCE 141	Dance Improvisation II	2
DNCE 145	Choreography I	2
DNCE 146	Choreography II	2

Two courses selected from the following classes:

DNCE 148	Palomar Drum and Dance Ensemble	2,3
DNCE 190	Ethnic Dance Production	1.5, 2
DNCE 197B	Modern Dance Production	1,1.5
DNCE 197C	Jazz Dance Production	1,1.5
DNCE 197D	Theatre Dance Production	1,1.5
DNCE 197E	Ballet Dance Production	1,1.5
DNCE 197F	Rehearsal and Performance	.5,1,1.5,2,3
DNCE 197J	Tap Dance Production	1,1.5

TOTAL UNITS**22.5 - 31**

*Should be taken the first semester

Recommended Courses: DNCE 101, 137, 148, 149, 170, 173, 184; MUS 100, 105, 137, 173; TA 100, 106, 115, 173; ZOO 200

NOTE: Students are screened for level placement in all technique classes the previous semester or the first day of class.

Dance

Provides student basic skills necessary for involvement in community dance activities, such as teaching in recreation centers, YMCA's or YWCA's, private studios; performing or choreographing for community theatre productions.

Certificate of Achievement

Program Requirements		Units
DNCE 100*	Survey of Dance	3
DNCE 101	Survey of World Dance	3
DNCE 105	Introduction to Dance History	3
DNCE 184	Introduction to Kinesiology	3
MUS 103	Introduction to Performing Arts	3

Three courses selected from the following classes:

DNCE 115	Fundamentals of Ballet	1.5
DNCE 116	Ballet I	1.5
DNCE 210	Ballet II	1.5,2.5
DNCE 211	Pointe/Pas de Deux	1.5,2.5

Two courses selected from the following classes:

DNCE 110	Modern Dance I	1.5
DNCE 111	Modern Dance II	1.5
DNCE 205	Modern Dance III	1,1.5
DNCE 206	Advanced Movement Patterns	1,1.5

Two courses selected from the following classes:

DNCE 120	Jazz Technique I	1.5
DNCE 121	Jazz Technique II	1.5
DNCE 215	Jazz Technique III	1,1.5
DNCE 216	Advanced Dance Technique	1,1.5

One course selected from the following classes:

DNCE 125	Theatre Dance I	1,1.5
DNCE 126	Theatre Dance II	1,1.5
DNCE 130	Tap Dance I	1,1.5
DNCE 131	Tap Dance II	1,1.5
DNCE 132	Tap Dance III	1,1.5

One course selected from the following classes:

DNCE 140	Dance Improvisation I	2
DNCE 141	Dance Improvisation II	2
DNCE 145	Choreography I	2
DNCE 146	Choreography II	2

Two courses selected from the following classes:

DNCE 148	Palomar Drum and Dance Ensemble	2,3
DNCE 190	Ethnic Dance Production	1.5, 2
DNCE 197B	Modern Dance Production	1,1.5
DNCE 197C	Jazz Dance Production	1,1.5
DNCE 197D	Theatre Dance Production	1,1.5
DNCE 197E	Ballet Dance Production	1,1.5
DNCE 197F	Rehearsal and Performance	.5,1,1.5,2,3
DNCE 197J	Tap Dance Production	1,1.5

TOTAL UNITS 30-37

*Should be taken the first semester

Recommended Courses: DNCE 101, 137, 148, 149, 170, 173, 184; MUS 100, 105, 137, 173; TA 100, 106, 115, 173; ZOO 200

NOTE: Students are screened for level placement in all technique classes the previous semester or the first day of class.

Dance Specialist for Children

Prepares the student to organize and teach programs of creative dance for children in schools, recreation departments, and other community projects.

Certificate of Achievement

Program Requirements		Units
DNCE 100*	Survey of Dance	3
DNCE 110	Modern Dance I	1,1.5
DNCE 111	Modern Dance II	1.5
DNCE 115	Fundamentals of Ballet	1,1.5
DNCE 140	Dance Improvisation I	2
DNCE 145	Choreography I	2
DNCE 161**	Teaching Methods in Dance	3
DNCE 184	Introduction to Kinesiology	3
CHDV 100 or	Child Development	
PE 102	PE in Elementary Schools	3
CE 100	Cooperative Education	1,2,3,4
TOTAL UNITS		20.5 - 24.5

* DNCE 100 is recommended as the first course to be taken in this certificate.

** DNCE 161 is recommended as the last course to be taken in this certificate.

COURSE OFFERINGS

Each 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 Modern Dance courses for credit.) Modern Dance, Ballet, Jazz Technique, Tap Dance, Spanish Flamenco Dance, Ballroom Dance, Latin Social Dance, Dance Improvisation, Choreography, production classes and Theatre Dance classes are defined as activity courses.

Courses numbered under 50 are non-degree courses.

Courses numbered under 100 are not intended for transfer credit.

DNCE 96 Special Projects (1,1.5,2,3)

2, 3, 4, or 6 hours lecture/laboratory

Note: May be taken 4 times

Prerequisite: Enrollment subject to project approval

Participation in performance or research projects beyond those normally expected in regular class sessions.

DNCE 97 Rehearsal and Performance (.5,1,1.5,2,3)

1, 2, 3, 4, or 6 hours lecture/laboratory

Note: May be taken 4 times

Prerequisite: Enrollment subject to audition

Participation in rehearsal and performance.

DNCE 97A Dance 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 Dance. See Class Schedule for specific topic offered. Course title will designate subject covered.

DNCE 100 Survey of Dance (3)

1½ hour lecture-3 hours lecture/laboratory

Transfer acceptability: CSU; UC

Survey of present day dance forms through lecture, film, and movement participation. Lecture to focus on body mechanics, prevention of injuries, analysis of education and career opportunities, and dance as an art form. Movement emphasis on basic dance skills, terms, and concepts inherent in most dance forms. Includes working with basic ballet, modern, jazz, tap, musical theatre, and folk dance techniques and styles.

DNCE 101 Survey of World Dance (3)

1½ hour lecture-3 hours lecture/laboratory

Transfer acceptability: CSU; UC

An analysis of the dances, dance styles, costumes, and musical accompaniment of dances from around the world as experienced through films, lecture, demonstration, and movement participation.

DNCE 105 Introduction to Dance History (3)

3 hours lecture

Transfer acceptability: CSU; UC

A survey of the development of Eastern and Western dance from earliest

civilizations to the present including East Indian, Indonesian, Asian and Native American cultures, with emphasis on the development of dance as a performing art in Europe and America, and the African-American influence on the social and performance aspects of dance in the world today.

DNCE 110 Modern Dance I (1,1.5)

2 or 3 hours lecture/laboratory

Note: Maximum of 4 completions in any combination of DNCE 110, DNCE 111, DNCE 205

Transfer acceptability: CSU; UC

Beginning dance techniques with emphasis on movement exploration, conditioning, and creative experience.

DNCE 111 Modern Dance II (1,1.5)

2 or 3 hours lecture/laboratory

Prerequisite: DNCE 110

Note: May be taken 3 times; maximum of 4 completions in any combination of DNCE 110, DNCE 111, DNCE 205

Transfer acceptability: CSU; UC

Intermediate dance techniques with emphasis on increasing movement skills and creative range.

DNCE 115 Fundamentals of Ballet (1,1.5)

2 or 3 hours lecture/laboratory

Recommended preparation: DNCE 100

Note: Maximum of 4 completions in any combination of DNCE 115, DNCE 116, DNCE 210

Transfer acceptability: CSU; UC

Introduction to ballet's traditions, principles, techniques, and terminology. Includes fundamental ballet exercises at barre and center with emphasis on placement.

DNCE 116 Ballet I (1,1.5)

2 or 3 hours lecture/laboratory

Prerequisite: DNCE 115

Note: Maximum of 4 completions in any combination of DNCE 115, DNCE 116, DNCE 210

Transfer acceptability: CSU; UC

Continued study of ballet techniques, principles, and terminology. Intermediate/beginning level with emphasis on combinations and an enlarged vocabulary of steps and terms.

DNCE 120 Jazz Technique I (1,1.5)

2 or 3 hours lecture/laboratory

Note: Maximum of 4 completions in any combination of DNCE 120, DNCE 121, DNCE 215

Transfer acceptability: CSU; UC

Beginning jazz movement and floor progressions.

DNCE 121 Jazz Technique II (1,1.5)

2 or 3 hours lecture/laboratory

Prerequisite: DNCE 120

Note: Maximum of 4 completions in any combination of DNCE 120, DNCE 121, DNCE 215

Transfer acceptability: CSU; UC

Intermediate jazz movement and floor progressions.

DNCE 123 Arts Across the Curriculum (3)

3 hours lecture

Note: Cross listed as ART/MUS/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.

DNCE 125 Theatre Dance I (1,1.5)

2 or 3 hours lecture/laboratory

Note: Maximum of 4 completions in any combination of DNCE 125, DNCE 126

Transfer acceptability: CSU; UC

Dance steps and styles used in musical theatre, past and present. Basic partnering techniques also included.

DNCE 126 Theatre Dance II (1,1.5)

2 or 3 hours lecture/laboratory

Prerequisite: DNCE 125

Note: Maximum of 4 completions in any combination of DNCE 125, DNCE 126

Transfer acceptability: CSU; UC

A continuation of Theatre Dance I. Dance steps and styles used in musical theatre. Focus on stage projection, partnering, developing stage characters, and auditioning skills.

DNCE 127 Spanish Flamenco Dance (1, 1.5)

2 or 3 hours lecture/laboratory

Note: Maximum of 4 completions in any combination of DNCE 127, DNCE 128

Transfer acceptability: CSU; UC

Study of specific Spanish dance styles, castanets, steps, and techniques of Spanish/Flamenco dance.

DNCE 128 Intermediate Spanish Flamenco Dance (1, 1.5)

2 or 3 hours lecture/laboratory

Prerequisite: DNCE 127

Note: Maximum of 4 completions in any combination of DNCE 127, DNCE 128

Transfer acceptability: CSU; UC

Study of different Spanish dance styles including regional, classical, Spanish/Flamenco, traditional and modern.

DNCE 130 Tap Dance I (1,1.5)

2 or 3 hours lecture/laboratory

Note: Maximum of 4 completions in any combination of DNCE 130, DNCE 131, DNCE 132

Transfer acceptability: CSU; UC

Beginning skills in tap dance covering basic and traditional material.

DNCE 131 Tap Dance II (1,1.5)

2 or 3 hours lecture/laboratory

Prerequisite: DNCE 130

Note: Maximum of 4 completions in any combination of DNCE 130, DNCE 131, DNCE 132

Transfer acceptability: CSU; UC

Intermediate level skills in tap dance with focus on new trends and styles.

DNCE 132 Tap Dance III (1,1.5)

2 or 3 hours lecture/laboratory

Prerequisite: DNCE 130 and 131

Note: May be taken 4 times; maximum of 4 completions in any combination of DNCE 130, DNCE 131, DNCE 132

Transfer acceptability: CSU; UC

Advanced skills in tap dance with focus on new trends and styles.

DNCE 133 Contemporary Social Dance (1)

2 hours lecture/laboratory

Note: May be taken 4 times

Transfer acceptability: CSU; UC

Development of beginning through intermediate levels of social dance techniques using West Coast Swing, Hustle, Night Club Two-Step, and Salsa.

DNCE 135 Beginning Ballroom Dance (1,1.5)

2 or 3 hours lecture/laboratory

Note: Maximum of 4 completions in any combination of DNCE 135, DNCE 136

Transfer acceptability: CSU; UC

Development of beginning social dance techniques concerning both standard and contemporary social dance steps and styling.

DNCE 136 Intermediate Ballroom Dance (1,1.5)

2 or 3 hours lecture/laboratory

Prerequisite: DNCE 135

Note: Maximum of 4 completions in any combination of DNCE 135, DNCE 136

Transfer acceptability: CSU; UC

Intermediate level social dance skills, steps, and styling.

DNCE 137 Cuban and Brazilian Drumming I**(1, 1.5, 2)***2, 3 or 4 hours lecture/laboratory***Note:** Cross listed as MUS 137**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.

DNCE 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 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.

*DNCE/MUS 138 pending Chancellor's Office approval at time of catalog publication.

DNCE 139 Advanced Ballroom Dance**(1,1.5)***2 or 3 hours lecture/laboratory***Prerequisite:** DNCE 136**Transfer acceptability:** CSU; UC

Advanced level social dance skills, steps, and styling.

*DNCE 139 pending Chancellor's Office approval at time of catalog publication.

DNCE 140 Dance Improvisation I**(2)***2 hours lecture/2 hours laboratory*

Note: Maximum of 4 completions in any combination of DNCE 140, DNCE 141

Transfer acceptability: CSU; UC

Study of dance through varied experiences in movement. Exploration of elements of time, space, and energy through movement improvisations and group studies.

DNCE 141 Dance Improvisation II**(2)***4 hours lecture/laboratory***Prerequisite:** DNCE 140

Note: Maximum of 4 completions in any combination of DNCE 140, DNCE 141

Transfer acceptability: CSU; UC

Study of dance through varied experiences in movement with emphasis on understanding movement principles, beginning music analysis, use of percussion and various forms of accompaniment, and composition of solo studies to composed music.

DNCE 145 Choreography I**(2)***4 hours lecture/laboratory***Corequisite:** DNCE 197K

Note: Maximum of 4 completions in any combination of DNCE 145, DNCE 146

Transfer acceptability: CSU; UC

Beginning choreography with emphasis on combining movements and developing ideas in relation to motivation, design, and dynamics.

DNCE 146 Choreography II**(2)***4 hours lecture/laboratory***Prerequisite:** DNCE 145**Corequisite:** DNCE 197K

Note: Maximum of 4 completions in any combination of DNCE 145, DNCE 146

Transfer acceptability: CSU; UC

Choreography and the theatrical environment. Study of dance as communication with emphasis on relationship of feeling, form, and content.

DNCE 147 Repertory**(1.5)***3 hours lecture/laboratory***Prerequisite:** Enrollment subject to audition

Recommended preparation: Previous dance training and performance experience. Knowledge and ability to perform different dance styles such as jazz, ballet, modern, musical theatre, etc.

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

Learning, rehearsing, and performing dance routines as an outreach to Palomar College, area high schools, and the community.

DNCE 148 Palomar Drum and Dance Ensemble (2,3)*4 or 6 hours lecture/laboratory***Prerequisite:** Enrollment subject to audition**Transfer acceptability:** CSU; UC

Rehearsal and performance of traditional music and dances of the African Diaspora: West African, Afro-Cuban, Afro-Brazilian, and Afro-Caribbean. Performance of original work influenced by dances of the African Diaspora. Emphasis will be on performing as an ensemble.

DNCE 149 Afro-Cuban/Brazilian Dance I (.5,1,1.5,2)*1½, 3, 4 ½, or 6 hours laboratory***Transfer acceptability:** CSU, UC

Beginning level Afro-Cuban/Brazilian movement.

DNCE 150 Afro-Cuban/Brazilian Dance II**(.5, 1, 1.5, 2)***1, 2, 3, or 4 hours lecture/laboratory***Prerequisite:** DNCE 149**Transfer acceptability:** CSU; UC

Intermediate level Afro-Cuban/Brazilian movement.

*DNCE 150 pending Chancellor's Office approval at time of catalog publication.

DNCE 151 Beginning Latin Social Dance (1,1.5,2)*2, 3 or 4 hours lecture/laboratory*

Note: May be taken 4 times; maximum of 4 completions in any combination of DNCE 151, DNCE 152

Transfer acceptability: CSU; UC

An exhilarating class designed to introduce students to the vibrant Hispanic culture through contemporary social dances. Through demonstration and movement participation students will explore a variety of social dances that are all part of the Latin Diaspora.

DNCE 152 Intermediate Latin Social Dance (1,1.5,2)*2, 3 or 4 hours lecture/laboratory*

Note: May be taken 4 times; maximum of 4 completions in any combination of DNCE 151, DNCE 152

Transfer acceptability: CSU; UC

An exhilarating class designed to continue exploring the vibrant Hispanic culture through contemporary social dances. Through demonstration and movement participation students will explore a variety of social dances that are all part of the Latin Diaspora.

DNCE 153 Capoeira: Afro/Brazil Martial Art I (1,1.5,2)*2, 3, or 4 hours lecture/laboratory*

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

A class designed to introduce students to the unique martial art form from Brazil known as Capoeira. Through lecture, demonstration and movement participation students will study this multi-faceted art form.

DNCE 154 Capoeira: Afro/Brazil Martial Art II**(1, 1.5, 2)***2, 3 or 4 hours lecture/laboratory***Prerequisite:** DNCE 153**Transfer acceptability:** CSU; UC

Intermediate level class of the unique martial art form from Brazil known as Capoeira. Through lecture, demonstration and movement participation students will study this multi-faceted art form.

*DNCE 154 pending Chancellor's Office approval at time of catalog publication.

DNCE 155 Hip Hop I**(1, 1.5)***2 or 3 hours lecture/laboratory***Transfer acceptability:** CSU; UC

Beginning level of Hip Hop, an exhilarating class Designed to introduce students to this unique contemporary dance form.

*DNCE 155 pending Chancellor's Office approval at time of catalog publication.

DNCE 156 Hip Hop II**(1, 1.5)***2 or 3 hours lecture/laboratory***Prerequisite:** DNCE155**Transfer acceptability:** CSU; UC

Intermediate level of Hip Hop, an exhilarating class Designed to introduce students to this unique contemporary dance form.

*DNCE 156 pending Chancellor's Office approval at time of catalog publication.

- DNCE 157 Hip Hop III** (1, 1.5)
2 or 3 hours lecture/laboratory
Prerequisite: DNCE156
Transfer acceptability: CSU; UC
 Advanced level of Hip Hop, an exhilarating class Designed to introduce students to this unique Contemporary dance form.
 *DNCE 157 pending Chancellor's Office approval at time of catalog publication.
- DNCE 158 Hawaiian and Tahitian Dance I** (1, 1.5)
2 or 3 hours lecture/laboratory
Transfer acceptability: CSU; UC
 Beginning level of an exhilarating class Designed to introduce students to the exotic Hawaiian and Tahitian culture through percussion, song and dance. Through demonstrations and movement participation students will explore a variety of dances from these two distinct and unique cultures that are part of the Polynesian Islands.
 *DNCE 158 pending Chancellor's Office approval at time of catalog publication.
- DNCE 159 Hawaiian and Tahitian Dance II** (1, 1.5)
2 or 3 hours lecture/laboratory
Prerequisite: DNCE 158
Transfer acceptability: CSU; UC
 Intermediate level of an exhilarating class Designed to introduce students to the exotic Hawaiian and Tahitian culture through percussion, song and dance. Through demonstrations and movement participation students will explore a variety of dances from these two distinct and unique cultures that are part of the Polynesian Islands.
 *DNCE 159 pending Chancellor's Office approval at time of catalog publication.
- DNCE 161 Teaching Methods in Dance** (3)
3 hours lecture
Transfer acceptability: CSU
 Explore the teaching/learning/knowning process by blending current educational, teaching and learning styles with practical hands on teaching experiences. Through the constant integration of theory and practice, we will utilize our own experiences and understanding and our interpretations of theoretical literature to construct our own persona pedagogies. The construction of a safe and consistent dance environment for all ages will be covered.
- DNCE 165 Production Management** (1.5,2)
3 or 4 hours lecture/laboratory
Note: May be taken 4 times
Transfer acceptability: CSU
 Principles and methods of organization, operation, promotion, programming, publicity, ticket sales, box office records, public relations, and graphics. Practical experience in college and community dance productions.
- DNCE 170 Pilates®** (.5,1)
1 or 2 hours lecture/laboratory
Note: May be taken 4 times
Transfer acceptability: CSU
 Pilates® method of body conditioning: an exercise program that improves muscle control, flexibility, coordination, strength, and tone. Teaches efficiency of movement.
- DNCE 173 Musical Theatre Scenes** (1)
3 hours laboratory
Note: Cross listed as MUS 173 and TA 173
Transfer acceptability: CSU
 Rehearsal and performance of solo and group scenes from Broadway musicals dating from the 1930's to the present.
- DNCE 182 Introduction to Arts Management** (3)
9 hours laboratory
Note: Cross listed as AMS 182, ART 182, MUS 182, and 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.
- DNCE 183 Internship in Arts Management** (3)
9 hours laboratory
Prerequisite: AMS/ART/MUS or TA 182
Note: Cross listed as AMS 183, ART 183, MUS 183, and TA 183
Transfer acceptability: CSU
 Practical experience in arts management in the visual and performing arts.
- DNCE 184 Introduction to Kinesiology** (3)
3 hours lecture
Transfer acceptability: CSU
 Designed to provide students with sound knowledge of body structures, systems, and functions. Identify the technical demands of dance and sports and evaluate and implement approaches to long-range development as dancers/athletes. Experiential anatomy will be introduced with concepts necessary to develop analytical skills of the student.
- DNCE 190 Ethnic Dance Production** (1.5,2)
3 or 4 hours lecture/laboratory
Prerequisite: Enrollment subject to audition
Note: May be taken 4 times
Transfer acceptability: CSU; UC
 Rehearsal and performance for dance concerts.
- DNCE 192 Tap and Theatre Dance** (1, 1.5)
2 or 3 hours lecture/laboratory
Transfer acceptability: CSU; UC
 Introduction to the fundamental skills in tap and theatre dance covering basic and traditional material.
- DNCE 197A Summer Dance Workshop** (1,1.5,2,3)
2, 3, 4, or 6 hours lecture/laboratory
Note: May be taken 4 times
Transfer acceptability: CSU; UC
 Concentrated work in a variety of dance areas. Specific content of each workshop differs and is composed of dance styles and techniques not included in the regular dance curriculum.
- DNCE 197B Modern Dance Production** (1,1.5)
2 or 3 hours lecture/laboratory
Prerequisite: Enrollment subject to audition
Recommended preparation: Concurrent enrollment in DNCE 111 or 205
Note: May be taken 4 times
Transfer acceptability: CSU; UC
 Rehearsal and performance for dance concerts.
- DNCE 197C Jazz Dance Production** (1, 1.5)
2 or 3 hours lecture/laboratory
Prerequisite: Enrollment subject to audition
Recommended preparation: Concurrent enrollment in DNCE 121 or 215
Note: May be taken 4 times
Transfer acceptability: CSU; UC
 Rehearsal and performance for dance concerts.
- DNCE 197D Theatre Dance Production** (1, 1.5)
2 or 3 hours lecture/laboratory
Prerequisite: Enrollment subject to audition
Note: May be taken 4 times
Transfer acceptability: CSU; UC
 Rehearsal and performance for dance concerts.
- DNCE 197E Ballet Dance Production** (1, 1.5)
2 or 3 hours lecture/laboratory
Prerequisite: Enrollment subject to audition
Recommended preparation: Concurrent enrollment in DNCE 210
Note: May be taken 4 times
Transfer acceptability: CSU; UC
 Rehearsal and performance for dance concerts.

DNCE 197F Rehearsal and Performance (.5,1,1.5,2,3)

1, 2, 3, 4, or 6 hours lecture/laboratory

Prerequisite: Enrollment subject to audition**Note:** May be taken 4 times**Transfer acceptability:** CSU; UC

Participation in dance rehearsal and performance.

DNCE 197H Topics in Dance (.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 Dance. See Class Schedule for specific topic offered. Course title will designate subject covered.

DNCE 197J Tap Dance Production (1, 1.5)

2 or 3 hours lecture/laboratory

Prerequisite: Enrollment subject to audition**Recommended preparation:** Concurrent enrollment in DNCE 131 or 132**Note:** May be taken 4 times**Transfer acceptability:** CSU; UC

Rehearsal and performance for dance concerts.

DNCE 197K Student Choreography Production (1.5, 2)

3 or 4 hours lecture/laboratory

Corequisite: DNCE 145 OR DNCE 146**Note:** May be taken 4 times**Transfer acceptability:** CSU; UC

Rehearsal and performance for dance concerts.

DNCE 205 Modern Dance III (1, 1.5)

2 or 3 hours lecture/laboratory

Prerequisite: DNCE 111**Note:** May be taken 4 times; maximum of 4 completions in any combination of DNCE 110, DNCE 111, DNCE 205**Transfer acceptability:** CSU; UC

Advanced dance technique with emphasis on performance skills.

DNCE 206 Advanced Movement Patterns (1, 1.5)

2 or 3 hours lecture/laboratory

Prerequisite: DNCE 205**Transfer acceptability:** CSU; UC

Advanced level dance technique in experimental dance forms.

DNCE 210 Ballet II (1.5,2.5)

3 or 5 hours lecture/laboratory

Prerequisite: DNCE 116**Note:** May be taken 4 times; maximum of 4 completions in any combination of DNCE 115, DNCE 116, DNCE 210**Transfer acceptability:** CSU; UC

Ballet techniques, principles, and terminology at the intermediate level with emphasis on line, phrasing, endurance, and progressively difficult steps and combinations.

DNCE 211 Pointe/Pas de Deux (1.5,2.5)

3 or 5 hours lecture/laboratory

Prerequisite: DNCE 210**Note:** May be taken 3 times**Transfer acceptability:** CSU; UC

Beginning pointe and partnering techniques in classical dance.

DNCE 215 Jazz Technique III (1, 1.5)

2 or 3 hours lecture/laboratory

Prerequisite: DNCE 121**Note:** Maximum of 4 completions in any combination of DNCE 120, DNCE 121, DNCE 215**Transfer acceptability:** CSU; UC

Advanced jazz movement and floor progressions.

DNCE 216 Advanced Dance Technique (1, 1.5)

2 or 3 hours lecture/laboratory

Prerequisite: DNCE 215**Transfer acceptability:** CSU; UC

Advanced level dance technique in commercial dance stylizations and rhythms.

DNCE 297 Experimental Projects in Dance**(.5,1,1.5,2,3)**

1, 2, 3, 4, or 6 hours lecture/laboratory

Prerequisite: Enrollment subject to project approval**Transfer acceptability:** CSU; UC – Credit determined by UC upon review of course syllabus.

Advanced dance projects including individual research, tutoring, and performance for college classes and community projects.

Dental Assisting (DA)

Contact the Dental Assisting Program for further information, (760) 744-1150, ext. 2571.

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

The Dental Assisting Program is accredited by the Commission on Dental Accreditation of the American Dental Association, and is approved by the Dental Board of California.

Certification and Licensing. Upon successful program completion, student will be issued a Certificate of Proficiency in Dental Radiography issued by Palomar College. Students who successfully complete the program are eligible to apply for the California Registered Dental Assistant Examination to become licensed as a California Registered Dental Assistant (RDA) with a Coronal Polishing Certificate; and are eligible to apply for the nationally recognized Certified Dental Assistant Examination offered by the Dental Assisting National Board, Incorporated (DANB).

ADMISSION REQUIREMENTS

Admission to the Dental Assisting Program is by special application. To be eligible for admission, applicants must:

- 1) Complete Palomar College Application for Admission;
- 2) Attend a Dental Assisting orientation meeting;
- 3) Submit proof of high school graduation or equivalency;
- 4) Admit medical and dental clearances including TB test results; and
- 5) Meet academic requirements as specified in the Dental Assisting Program brochure.

Dental assistants need to have good vision, hearing, and the ability to communicate orally. In addition, they must have the ability to comprehend and interpret written information; and the dexterity to use small dental instruments.

Dental Assisting (Registered Dental Assistant)

A.A. Degree Major or Certificate of Achievement

To remain enrolled in the program, students must earn a minimum grade of "C" (2.0) in each of the required courses. Students must pass laboratory and clinical evaluations at 75% competency or a substandard grade will be assigned for the course. A student may fail a dental assisting course on the basis of clinical practice even though theory grades may be passing.

Program Requirements		Units
DA 50	Introduction to Dental Sciences/Occupations	3
BUS 125 or	Business English	
ENG 50 or	Introductory Composition	
ENG 100	English Composition	3,4
SPCH	Any course (except 145, 150, and 197)	3

EME 55 or CPR for Health Care Providers
Proof of current BLS for Healthcare Providers Certificate 0, .5

First Semester

DA 57	Dental Sciences and Anatomy	4
DA 60	Dental Materials	3
DA 65	Dental Practice Management	2
DA 70	Dental Radiography I	2.5
DA 75	Dental Operative Procedures	5
DA 80	Coronal Polishing	1

Second Semester

DA 71	Dental Radiography II	.5
DA 81	Clinical Coronal Polishing	.5
DA 85	Advanced Dental Procedures	4
DA 90	Clinical Rotation	6.5
TOTAL UNITS		38-39.5

COURSE OFFERINGS

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

DA 47 Dental 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: Credit/No Credit grading only; may be taken 4 times
Topics in Dental Assisting. See Class Schedule for specific topic offered.
Course title will designate subject covered.

DA 50 Introduction to Dental Sciences and Dental Occupations (3)

3 hours lecture

Note: Graded only

General orientation to dental assisting. Introduction to basic oral anatomy, oral hygiene techniques and prevention, human behavior, dental nomenclature, dental assisting, history of dentistry, ethics, role of the dental assistant and other auxiliary personnel; licensing and certification of dental assistants; dental jurisprudence and malpractice; psychology and observation in dental offices.

DA 57 Dental Sciences and Anatomy (4)

4 hours lecture

Prerequisite: Admission to the Dental Assisting Program

Note: Graded only

Introduction of dental terminology, histology, embryology, tooth growth, eruption, and anatomy; head and neck anatomy, and physiology of the body. Form and function of individual teeth, occlusion, oral pathology, diet and nutrition, relation of oral health to general health, microbiology, disease control and dental pharmacology.

DA 60 Dental Materials (3)

3 hours lecture-1 hour laboratory

Prerequisite: Admission to the Dental Assisting Program

Note: Graded only

Chemical properties and uses of dental materials and solutions; manipulative techniques and methods of preparation.

DA 65 Dental Practice Management (2)

2 hours lecture-1 hour laboratory

Prerequisite: Admission to the Dental Assisting Program

Note: Graded only

Reception and care of the patient in the dental office, communication skills, telephone techniques, appointment scheduling, dental records (charting health and dental history), filing, recalls, bookkeeping, accounts receivable and accounts payable, purchasing inventory, principles of and use of insurance forms and collections.

DA 70 Dental Radiography I (2.5)

2 hours lecture- 1.5 hours laboratory

Prerequisite: Admission to the Dental Assisting Program

Note: Graded only

Theory and technique of oral radiography, radiation hygiene, anatomical landmarks, and methods and materials for processing radiographs. The laboratory portion will provide the student with knowledge concerning

film placement, cone angulation, exposing and developing radiographs, and mounting and evaluating processed films.

DA 71 Dental Radiography II (.5)

1.5 hours laboratory

Prerequisite: DA 50; DA 70; and proof of Hepatitis B Immunization; and EME 55 or current BLS for Healthcare Providers Certificate

Note: Graded only

Advanced experience regarding film placement, cone angulation, exposing and developing radiographs, mounting and evaluating films to further enhance the student's patient management skills.

DA 75 Dental Operative Procedures (5)

3 hours lecture-6 hours laboratory

Prerequisite: Admission to the Dental Assisting Program

Note: Graded only

Applications of and introduction to preclinical dental assisting in operative and specialty dental procedures, care of equipment, instrumentation, sterilization techniques, disease transmission, charting, utilization of dental materials, dental office emergencies, and functions delegated to the California Registered Dental Assistant.

DA 80 Coronal Polishing (1)

2 hours lecture/laboratory

Prerequisite: Admission to the Dental Assisting Program

Note: Graded only

Identification of dental plaque, other soft deposits, tooth stains, discolorations, periodontics, and deposit retention factors. Polishing procedures: Polishing agents, prophylaxis angle, attachments, and technique.

DA 81 Clinical Coronal Polishing (.5)

1.5 hours laboratory

Prerequisite: DA 50; DA 80; proof of Hepatitis B Immunization; and EME 55 or current BLS for Healthcare Providers Certificate

Note: Graded only; may be taken 2 times

Application of concepts and skills from pre-clinical DA 80. Emphasis is on the coronal polishing procedure as applied to clinical patients.

DA 85 Advanced Dental Procedures (4)

2 hours lecture-6 hours laboratory

Prerequisite: DA 50; DA 60; and DA 75; proof of Hepatitis B Immunization; and EME 55 or current BLS for Healthcare Providers Certificate

Note: Graded only

Advanced laboratory and clinical experience focusing on basic skills previously learned. Emphasis is placed on 1) clinical use of impression materials for obtaining study models, 2) pouring and trimming plaster and stone models, 3) fabrication of custom trays for preliminary impressions, 4) fabrication of provisional restorations, and 5) advanced prosthodontic and orthodontic instruction.

DA 90 Clinical Rotation (6.5)

19½ hours laboratory/clinical

Prerequisite: DA 50; DA 75; proof of Hepatitis B Immunization; and EME 55 or current BLS for Healthcare Providers Certificate

Note: Credit/No Credit only

An intensive program of practical dental experiences, working with patients and staff at the Camp Pendleton Naval Dental Clinic and/or private dental offices. Students will assist the dentists in specialized and operative procedures and duties delegated to the California licensed Registered Dental Assistant..

DA 97 Dental 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: Credit/No Credit only; may be taken 4 times

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

Diesel Mechanics Technology (DMT)

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

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

Diesel Technology

A.A. Degree Major or Certificate of Achievement

Program Requirements		Units
AT 105	Automotive Electricity	2
AT 197	Associated Studies in Automotives	3
DMT/RDMT 50	Introduction to Diesel Mechanics	3
DMT/RDMT 55	Hvy-Dty Diesel Tune-Up/Analysis	3
DMT/RDMT 61	Diesel Engine Rebuilding I	3
DMT/RDMT 62	Diesel Engine Rebuilding II	3
DMT/RDMT 65	Air Brake Systems	3
DMT/RDMT 66	Truck Transmission/Drive Lines	3
IT 100	Technical Mathematics	3
Electives (Select 6 units)		
AT 125	Automotive Machining	3
CE 100	Cooperative Education	1,2,3,4
DMT 54	Heavy-Duty Electricity	3
DMT 56	Alternative Fuels	3
DMT/RDMT 70	Med-Duty Diesel Engine Tune-up	3
DMT 81	Basic Hydraulics	3
DMT 96	Special Problems/Diesel Tech	.5-3
DMT/RDMT 97	Diesel Mechanics Tech Workshop	.5-3
WELD 100	Welding I	3
TOTAL UNITS		32

The Diesel Technology program is also offered in ROP Diesel Mechanics Technology.

COURSE OFFERINGS

Courses numbered under 100 are not intended for transfer credit.

DMT 50 Introduction to Diesel Mechanics (3)

6 hours lecture/laboratory

Note: Cross listed as RDMT 50

Theory and practice of fundamental skills for the maintenance and operation of basic diesel engines. Topics for study include: basic theory of operation; engine applications; engine lubricating and cooling; intake, exhaust and fuel systems; and electronic control.

DMT 54 Heavy-Duty Electricity (3)

6 hours lecture/laboratory

Note: May be taken 2 times

Heavy-duty electricity systems principles and service. Topics of study include electrical theory, batteries, wiring diagrams, 12V and 24V starters, alternators and electrical troubleshooting, and test equipment.

DMT 55 Heavy-Duty Diesel Tune-Up and Engine Analysis (3)

2 hours lecture-4 hours laboratory

Prerequisite: DMT/R DMT 50;

Note: Cross listed as R DMT 55; may be taken 2 times

The use of software and diagnostic equipment in performing diesel tune-up. Topics include: theory of operation, tune-up procedures, fuel system function and repair, diagnostic equipment usage, electronic engine controls, mechanical and electronic engine system troubleshooting.

DMT 56 Alternative Fuels (3)

6 hours lecture/laboratory

Recommended preparation: DMT/R DMT 50

Note: May be taken 2 times

Theory and servicing of alternative fueled engines. Topics for study include various types of fuels, fuel handling and safety procedures, basic principles, regulators and mixers, all system components operation and service, electronic control systems, and emission testing.

DMT 61 Diesel Engine Rebuilding I (3)

6 hours lecture/laboratory

Recommended preparation: DMT/R DMT 50

Note: Cross listed as RDMT 61; may be taken 2 times

Theory and practice in rebuilding diesel engines. Topics for study include disassembly, cleaning, inspection, and analysis of engine parts. Also included are cylinder head service, sleeve and piston service, advanced machining and measuring techniques.

DMT 62 Diesel Engine Rebuilding II (3)

6 hours lecture/laboratory

Recommended preparation: DMT/R DMT 61

Note: Cross listed as R DMT 62

Theory and practice in rebuilding diesel engines. Topics for study include final cleaning, inspection and reassembly of engine parts. Also included are assembly measuring, torque procedures and torque-turn methods used on engine assembly, and engine testing upon completion of assembly.

DMT 65 Air Brake Systems (3)

2 hours lecture-3 hours laboratory

Note: Cross listed as RDMT 65

The service and repair of heavy-duty hydraulic and air brake systems and their components. Topics of study include brake troubleshooting, complete system repair, anti-skid brake system, and related axle services.

DMT 66 Truck Transmission and Drive Lines (3)

2 hours lecture-3 hours laboratory

Note: Cross listed as RDMT 66

Service and repair of heavy-duty truck drive lines. Topics for study include the disassembly, inspection and reassembly of single and multiple disc clutches, four to fifteen speed transmissions, universal joints, and differentials.

DMT 70 Medium-Duty Diesel Engine Tune-Up (3)

2 hours lecture-4 hours laboratory

Note: Cross listed as RDMT 70; may be taken 2 times

The use of diesel tune-up and diagnostic equipment. Topics include: fuel systems; compression testing; fuel pump and injection timing; troubleshooting procedures; alternators, regulators, and starting systems.

DMT 81 Basic Hydraulics (3)

2 hours lecture-3 hours laboratory

Note: May be taken 2 times

Basic hydraulic system principles and service. Topics of study include hydraulic theory, safety requirements, hydraulic diagrams and ISO symbols, component operation, service and repair troubleshooting, and test equipment usage.

DMT 96 Special Problems in Diesel 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.

Prerequisite: DMT/R DMT 50

Note: May be taken 4 times

A special study in topics in the area of interest to diesel mechanics, generally research in nature. The content to be determined by the need of the student under a signed contract with the instructor.

DMT 97 Diesel Mechanics Technology 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: Cross listed as RDMT 97; may be taken 4 times

A special selection of topics specific in nature. The contents will vary depending on specific needs of the students and community.

Disability Resource (DR)

Contact the Disability Resource Center for further information, (760) 744-1150, ext. 2375

COURSE OFFERINGS

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

DR 5 Personal Adjustment and Growth (2)

1½ hours lecture-1½ hours laboratory

Note: May be taken 3 times

An individualized class which explores existing concepts, theories, and practices pertaining to self-appraisal defense mechanisms and interpersonal relations, and how that relates to school management and to the student's particular disability. This course is designed to meet the needs of students with disabilities.

DR 10 Educational Assessment/Guidance (.5)

½ hour lecture

Note: Open entry/Open exit; Credit/No Credit grading only; may be taken 2 times

This individualized course is designed to assess, by means of diagnostic testing and the California Community College learning disability eligibility process, the student's need for academic accommodations in the community college setting. The student will be counseled in planning appropriate educational goals and in selecting and preparing for college classes.

DR 15 English Essentials for Students with Disabilities (3)

3 hours lecture

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

Provides special assistance for students with disabilities to develop basic skills in written communication. Working with computers is part of the class format.

DR 18 Phonics for Students with Disabilities (3)

3 hours lecture

Note: May be taken 3 times

This course is designed to meet the needs of students with disabilities. It teaches the use of phonics as a spelling and reading strategy.

DR 20 Pre-Algebra Support (3)

3 hours lecture

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

Provides programmed instruction on an individual and/or small group basis to students with disabilities. Practice in understanding and performing basic arithmetic tasks necessary for successful functioning in society.

DR 25 Algebra Support (1.5,3)

1½ or 3 hours lecture

Recommended preparation: MATH 15 or eligibility for MATH 50

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

Provides personalized instruction in basic study management techniques for the support of students with disabilities in mainstream classes. The course will help students with disabilities to develop specialized study techniques and interpersonal skills needed for success in mainstream classes.

DR 26 Composition Skills and Strategies for the Intermediate Writer (3)

3 hours lecture

Recommended preparation: ENG 10 or eligibility for ENG 50

Note: May be taken 2 times

This class is designed to help students with disabilities improve their intermediate composition skills through methods and strategies specific to their disabilities.

DR 31 Language Development (1,2)

2 or 4 hours lecture/laboratory

Note: May be taken 4 times

This course is for the student with communication problems relating to language processing. The course will include assessment, theory, facilitation techniques, and use of special devices.

DR 35 Speech and Language Development: Articulation, Fluency, and Voice Problems (3)

3 hours lecture

Note: May be taken 4 times

For students with communication problems relating to articulation, rate/fluency, and voice. It includes assessment, theory, physiology, and management strategies.

DR 40 Adapted Computer Skills (3)

3 hours lecture

Note: May be taken 3 times

This course is designed to meet the needs of the students with disabilities. Students learn to use computers with access technology such as voice recognition, screen readers, screen enlargement and other hardware adaptations.

DR 41 Advanced Adapted Computers for Students with Disabilities (3)

3 hours lecture

Recommended preparation: DR 40

Note: May be taken 3 times

Provides training in more advanced software for students with disabilities by using their prescribed access technology. Course work meets computer literacy competence for CSUSM.

DR 45L Adapted Computer Laboratory (1)

3 hours laboratory

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

Provides supervised hands-on opportunities to acquire and reinforce skills on computer equipment adapted for students with disabilities.

DR 47 Topics in Disability Resource (.5-3)

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

Note: May be taken 3 times

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

*DR 47 pending Chancellor's Office approval at time of catalog publication

Drafting Technology (DT)

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

Architectural Drafting Technology

Prepares students for employment as a design/production drafter in the field of architecture.

Students concerned with transfer into an architectural program at a university should review specific course requirements with their architectural instructor and the Counseling Department.

A.A. Degree Major or Certificate of Achievement

Program Requirements	Units
DT 105 Basic Architectural Drafting	3
DT 120 or Architectural History	
DT 121 Multicultural Architectural History	3
DT/RDT 125 AutoCAD Introduction to Computer Aided Drafting	3
DT 135 Architectural Materials/Methods Construction	3
DT 144 Architectural Drawing and Color	3
DT 145 Architectural Delineation/Pictorial Drawing	4
DT 155 Architectural Theory	2
DT/RDT 200* Advanced Computer Aided Architectural Drafting	4
IT 100 Technical Mathematics	3

Group One (Select 3 units)

DT 120 or	Architectural History	
DT 121	Multicultural Architectural History	3

Group Two (Select 9 units)

DT 100	Basic Mechanical Drawing	3
DT 129	Basic Architectural Drafting w/AutoCAD	3
DT/RDT 126	AutoCAD Intermediate Computer Aided Drafting	3
DT/RDT 127	AutoCAD Customization	3
DT/RDT 128	SolidWorks Intro to 3D Design and Presentation	3
DT 180	3D Studio Max – Intro to 3D Modeling/Animation	3
DT 182	3D Studio Max - Advanced 3D Modeling/Animation	3
DT/RDT 202	Advanced Comp Aided Architectural Drafting II	4
DT 215	Architectural Design Fundamentals I	5
DT 216	Architectural Design Fundamentals II	5
CE 100	Cooperative Education	1,2,3,4
CE 105	Job Hunting Techniques	1,2,3
CSIS 105	Computer Concepts/Microcomputer	3
MATH 115	Trigonometry	3
TOTAL UNITS		40

*DT 106 may be substituted for DT 200.

Computer Assisted Drafting

Prepares students in the skills necessary for employment as a computer assisted drafting operator.

A.A. Degree Major or Certificate of Achievement

Program Requirements		Units
CSIS 105	Computer Concepts/Microcomputer	3
DT/RDT 125	AutoCAD Introduction to Computer Aided Drafting	3
DT/RDT 126	AutoCAD Intermediate Computer Aided Drafting	3
DT/RDT 127	AutoCAD Customization	3
DT/RDT 128	SolidWorks Intro to 3D Design and Presentation	3
IT 100	Technical Mathematics	3
Electives (Select 12 units)		
DT 110	Technical Drafting I with AutoCAD	4
DT 111	Technical Drafting II with AutoCAD	4
DT 140	Electronic Drafting and Design	3
DT 145	Architectural Delineation/Pictorial Drawing	3
DT 196B	Special Problems/CAD	1,2,3
DT 200	Advanced Computer Aided Architectural Drafting	4
DT 210	Printed Circuit Board Design	3
BUS 205	Business Writing	3
CE 100	Cooperative Education	1,2,3,4
CE 105	Job Hunting Techniques	1,2,3
MATH 110	College Algebra	4
MATH 115	Trigonometry	3
TOTAL UNITS		30

Drafting Technology - Multimedia

Prepares students in the skills necessary for employment in the multimedia presentation field.

A.A. Degree Major or Certificate of Achievement

Program Requirements		Units
DT/RDT 125	AutoCAD Introduction to Computer Aided Drafting	3
DT/RDT 126	AutoCAD Intermediate Computer Aided Drafting	3
DT/RDT 128	SolidWorks Intro to 3D Design and Presentation	3
DT 180	3D Studio Max – Intro to 3D Modeling/Animation	3
DT 182	3D Studio Max - Advanced 3D Modeling/Animation	3
DT 184	Real Time 3D Technical/Game Animation	2
IT 100	Technical Mathematics	3
Electives (Select 12 units)		
ART 241	Computer Graphics	3
ARTD 150	Digital Concepts/Techniques in Art	3
ARTD 220	Motion Design	3
ARTI 246	Digital 3D Design and Modeling	3
ARTI 247	Digital 3D Design and Animation	3
CE 100	Cooperative Education	1,2,3,4
CE 105	Job Hunting Techniques	1,2,3
COMM 100	Mass Media in America	3
CSIS/		
RCSIS 120	Microcomputer Applications	3

DT/RDT 130	CAD/CAM Machining	3
DT/RDT 131	SolidWorks Adv to 3D Design and Presentation	3
DT 196B	Special Problems/CAD	3
GC/RGC 140	Digital Imaging/Photoshop I	3
GC/RGC 200	Introduction to Multimedia	3
GC 201	Intermediate Multimedia	3
MATH 50 or	Beginning Algebra	
MATH 60 or	Intermediate Algebra	
MATH 110 or	College Algebra	
MATH 115	Trigonometry	3,4
MUS 180	Computer Music I	3
TOTAL UNITS		32

Drafting Technology - Technical

Prepares students in the skills necessary for employment as a drafter in machine, mechanical-electrical, aeronautical, civil, and other related engineering fields.

A.A. Degree Major or Certificate of Achievement

Program Requirements		Units
DT 100	Basic Mechanical Drawing	3
DT 110	Technical Drafting I with AutoCAD	4
DT 111	Technical Drafting II with AutoCAD	4
DT/RDT 125	AutoCAD Intro to Computer Aided Drafting	3
DT/RDT 126	AutoCAD Inter Computer Aided Drafting	3
DT/RDT 127	AutoCAD Customization	3
DT/RDT 128	SolidWorks Intro to 3D Design and Presentation	3
IT 100	Technical Mathematics	3

Electives (Select 6 units)

CE 100	Cooperative Education	1,2,3,4
CE 105	Job Hunting Techniques	1,2,3
CSIS/		
RCSIS 120	Microcomputer Applications	3
DT 70	Drawing/Constr/Cabinet/Millwork	3
DT/RDT 130	CAD/CAM Machining	3
DT/RDT 131	SolidWorks Adv 3D Design and Presentation	3
DT 180	3D Studio Max – Intro to 3D Modeling/Animation	3
DT 182	3D Studio Max - Advanced 3D Modeling/Animation	3
DT 184	Real Time 3D Technical/Game Animation	2
DT 196B	Special Problems in CAD	1,2,3
MATH 50 or	Beginning Algebra	
MATH 60 or	Intermediate Algebra	
MATH 110 or	College Algebra	
MATH 115	Trigonometry	3,4
SURV 105	Topographic Mapping	3
TOTAL UNITS		32

Electro-Mechanical Drafting and Design

Drafts detailed working drawings of electro-mechanical equipment and devices. Indicates dimensions, materials, and manufacturing procedures for electronic industry.

A.A. Degree Major or Certificate of Achievement

Program Requirements		Units
DT 110	Technical Drafting I with AutoCAD	4
DT 111	Technical Drafting II with AutoCAD	4
DT/RDT 125	AutoCAD Introduction to Computer Aided Drafting	3
DT/RDT 127	AutoCAD Customization	3
DT/RDT 128	SolidWorks Intro to 3D Design and Presentation	3
DT 140	Electronic Drafting and Design	3
DT 210	Printed Circuit Board Design	3
IT 100	Technical Mathematics	3
Electives (Select 6 units)		
BUS 205	Business Writing	3
CE 100	Cooperative Education	1,2,3,4
CSIS/		
RCSIS 120	Microcomputer Applications	3
DT/RDT 126	AutoCAD Intermediate Computer Aided Drafting	3
DT/RDT 131	SolidWorks Adv 3D Design and Presentation	3
DT/RDT 130	CAD/CAM Machining	3
DT 196B	Special Problems in CAD	3
DT 211	Advanced Printed Circuit Design	3
ECHT 160	Electronics for Everyone	3
MATH 110	College Algebra	4
TOTAL UNITS		32

Interactive Media Design

The Interactive Media Design program is also offered in Art and Graphic Communications.

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 - Advanced 3D Modeling/Animation	3
GC/RGC 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 and Techniques in Art	3
ARTD 220	Motion Design	3
DT/RDT 128	SolidWorks Intro to 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		Units
ART 111	Graphic Design	3
ARTD 220	Motion Design	3
ARTI 247	Digital 3D Design and Animation	3
GC 142	Digital Imaging/Photoshop III	3
GC/RGC 200	Introduction to Multimedia	3
GC 201	Intermediate Multimedia	3
GC 204	Motion Graphics for Multimedia-A	3
Electives (Select two courses)		
ARTD 150	Digital Concepts and Techniques in Art	3
ARTI 246	Digital 3D Design and Modeling	3
DT 180	3D Studio Max – Intro to 3D Modeling/Animation	3
DT 182	3D Studio Max - Advanced 3D Modeling/Animation	3
GC 100	Graphic Communications	3
GC/RGC 140	Digital Imaging/Photoshop I	3
GC/RGC 152	Desktop Publishing with Illustrator	3
GC/ART 197	Multimedia Project	3
GC/RGC 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

COURSE OFFERINGS

Courses numbered under 100 are not intended for transfer credit.

DT 70	Drawing for the Construction/Cabinet/Millwork Trades	(3)
<i>2 hours lecture-3 hours laboratory</i>		
Note: Cross listed as CFT 70		
Planning, drawing, interpreting, estimating construction, and cabinetwork and millwork drawing.		

DT 100	Basic Mechanical Drawing	(3)
<i>2 hours lecture-3 hours laboratory</i>		
Transfer acceptability: CSU		
Fundamentals of mechanical drawing including theory, lettering, sketching, geometric constructions, orthographic projection, sectioning, developments, dimensioning, and pictorial and working drawings.		

DT 105	Basic Architectural Drafting	(3)
<i>6 hours lecture/laboratory</i>		
Transfer acceptability: CSU		
An introduction to architectural drafting including symbols, lettering, construction principles, details, and codes as related to the development of working drawings for simple residential design.		

DT 106	Intermediate Architectural Drafting	(3)
<i>6 hours lecture/laboratory</i>		
Prerequisite: DT 105		
Transfer acceptability: CSU		
A continued study in residential design including study in details, materials, elevations, specifications, electrical, and plumbing.		

DT 110	Technical Drafting I with AutoCAD	(4)
<i>8 hours lecture/laboratory</i>		
Prerequisite: Completion of, or concurrent enrollment in, DT/R DT 125		
Transfer acceptability: CSU		
Fundamentals of drafting including lettering, sketching, instruments, geometric constructions, orthographic projections, dimensioning, tolerancing, sectional views and auxiliary views. Drafting will be performed on the computer using AutoCAD software.		

DT 111	Technical Drafting II with AutoCAD	(4)
<i>8 hours lecture/laboratory</i>		
Prerequisite: DT 110 and DT/R DT 125		
Transfer acceptability: CSU		
The study of Advanced Drafting practices using AutoCAD software. Basic studies will lead into geometric dimensioning, tolerancing, pictorial drafting, descriptive geometry and revolutions. Working/shop drawings in topography, developments, cabinet/millwork, structural steel, and welding will be performed.		

DT 116	Geometric Dimensioning and Tolerancing	(3)
<i>6 hours lecture/laboratory</i>		
Prerequisite: DT 100		
Transfer acceptability: CSU		
Note: May be taken 2 times		
An introduction to geometric dimensioning and tolerancing as used in the electro/mechanical industry. The student will learn to identify and use appropriate geometric symbols and techniques of geometric dimension and produce industrial quality drawings.		

DT 120	Architectural History	(3)
<i>3 hours lecture</i>		
Transfer acceptability: CSU; UC – DT 120 and 121 combined: maximum credit, one course		
An overview of architectural history beginning with prehistoric cultures and continuing through Egyptian and Mesopotamia, Aegean and Greek, Roman and Byzantine, Romanesque and Gothic, and the Renaissance and Baroque periods. The second half of the course focuses on the development of modern western architecture.		

DT 121	Multicultural Architectural History	(3)
<i>3 hours lecture</i>		
Transfer acceptability: CSU; UC – DT 120 and 121 combined: maximum credit, one course		
A comparative study of the architecture of cultures outside the Western mainstream including: Pre-Columbian America; India and Southeast Asia, China and Japan, Russia and Eastern Europe; and the Moslem Empires. Special emphasis on the cultural forces and conditions which shaped and evolved the architecture.		

DT 125	AutoCAD Introduction to Computer Aided Drafting	(3)
<i>6 hours lecture/laboratory</i>		
Note: Cross listed as R DT 125; may be taken 2 times; maximum of 4 completions in any combination of DT/R DT 125, DT/R DT 126, DT/R DT 127		

Transfer acceptability: CSU; UC – DT 125 and 126 combined: maximum credit, one course

An introduction to computer aided drafting using AutoCAD software and IBM compatible computers. Hands-on experience with AutoCAD to include the following operations: preparing and editing drawings, storage and retrieval of drawings, and production of commercial quality drawings on a plotter. Introductory computer terminology and techniques in Windows.

DT 126 AutoCAD Intermediate Computer Aided Drafting (3)

6 hours lecture/laboratory

Prerequisite: DT 125/R DT 125

Note: Cross listed as R DT 126; may be taken 2 times; maximum of 4 completions in any combination of DT/R DT 125, DT/R DT 126, DT/R DT 127

Transfer acceptability: CSU; UC – DT 125 and 126 combined: maximum credit, one course

Advanced theory and hands-on operation of a CAD system. Emphasis is placed on large scale drawings, three-dimensional software techniques, orthographic projections, and complex computer aided manufacturing applications.

DT 127 AutoCAD Customization (3)

6 hours lecture/laboratory

Prerequisite: DT/R DT 126

Note: Cross listed as R DT 127; may be taken 2 times; maximum of 4 completions in any combination of DT/R DT 125, DT/R DT 126, DT/R DT 127

Transfer acceptability: CSU; UC

Advanced theory and hands-on operation of a CAD system. Emphasis is placed on increased productivity using customization and portfolio presentation for successful career opportunities

DT 128 SolidWorks Introduction to 3D Design and Presentation (3)

6 hours lecture/laboratory

Prerequisite: DT/R DT 125

Recommended preparation: DT 110

Note: Cross listed as R DT 128; may be taken 2 times

Transfer acceptability: CSU

Advanced theory and hands-on operation of three-dimensional software techniques. Emphasis is placed on wireframe, surface, solid, and parametric three-dimensional modeling.

DT 129 Basic Architectural Drafting with Auto CAD (3)

6 hours lecture /laboratory

Basic fundamentals of architectural drafting using AutoCAD software to include the following drawings: plot plans, floor plans, foundation plans, framing plans, sections, elevations, and basic construction details.

DT 130 CAD/CAM Machining (3)

6 hours lecture/laboratory

Prerequisite: DT 110 and DT/R DT 128

Note: Cross listed as R DT 130; may be taken 2 times

Hands-on operation of importing three-dimensional solid and parametric three-dimensional models into CAD/CAM operations.

DT 131 SolidWorks Advanced 3D Design and Presentation (3)

6 hours lecture/laboratory

Prerequisite: DT/R DT 128

Note: Cross listed as R DT 131; may be taken 2 times

Transfer acceptability: CSU

Advanced theory and hands-on operation of solid and parametric three-dimensional models. Emphasis is placed on creating molds, advanced sheet metal design and developing dynamic assemblies.

DT 135 Architectural Materials and Methods of Construction (3)

6 hours lecture/laboratory

Transfer acceptability: CSU

An introduction to the use and application of building construction materials and processes.

DT 140 Electronic Drafting and Design (3)

6 hours lecture/laboratory

Note: May be taken 2 times

Transfer acceptability: CSU

Electro-mechanical drafting and design generally required for an entry-level position in the electronic industry.

DT 144 Architectural Drawing and Color (3)

6 hours lecture/laboratory

Note: May be taken 2 times

Transfer acceptability: CSU; UC

An introduction to basic architectural drawing and design that explores the theory and application of perspective, shades and shadows, and color to architectural sketching, drawing, and model building.

DT 145 Architectural Delineation and Pictorial Drawing (4)

8 hours lecture/laboratory

Recommended preparation: DT/R DT 125 and DT 144

Note: May be taken 2 times

Transfer acceptability: CSU; UC

Principles and techniques of pictorial drawing in architecture including isometric, oblique, and perspective projection; shades and shadows; and presentation graphics. The three-dimensional and shading capabilities of AutoCAD will be utilized in coordination with the use of Photoshop software as a color rendering tool.

DT 155 Architectural Theory (2)

4 hours lecture/laboratory

Transfer acceptability: CSU

A study and analysis of the concepts and philosophies that have influenced or been the basis of architectural form from the Classical period to the present. The analysis will include the use of drawing and model-building tools to gain an understanding of these principles applied to specific structures throughout history.

DT 180 3D Studio Max – Introduction to 3D Modeling and Animation (3)

6 hours lecture/laboratory

Note: May be taken 2 times

Transfer acceptability: CSU

An overview of 3D Studio Max. Hands-on operation of the software to produce basic three-dimensional models and basic technical animations.

DT 182 3D Studio Max – Advanced 3D Modeling and Animation (3)

6 hours lecture/laboratory

Prerequisite: DT 180

Note: May be taken 2 times

Transfer acceptability: CSU

Advanced 3D Studio Max applications to create special visual effects for high-end image production. Advanced keyframing, time-based editing, controllers, and video post will be employed to master state-of-the-art rendering and animation. The class is structured to help students start using 3D Studio Max in a production environment.

DT 184 Real Time 3D Technical/ Game Animation (2)

4 hours lecture/laboratory

Students will create interactive 3D applications using a direct X base real time engine for the game industry, computer based training and product visualization.

DT 196A Special Problems in Drafting (1,2,3)

2, 4, or 6 hours lecture/laboratory

Note: May be taken 4 times

Transfer acceptability: CSU

This course is designed to aid the student in the enrichment of the area of concentration in drafting and is of a research nature. Content to be determined by the need of the student under signed contract with the instructor.

DT 196B Special Problems in Computer Aided Drafting (1,2,3)

2, 4, or 6 hours lecture/laboratory

Note: May be taken 4 times for a maximum of 9 units

Transfer acceptability: CSU

This is an advanced course designed to aid the student in the enrichment of an area of concentration in AutoCAD and third party drafting software and is of a research nature. Content to be determined by the need of the student under signed contract with the instructor.

DT 197 Drafting 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

Transfer acceptability: CSU

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

DT 200 Advanced Computer Aided Architectural Drafting (4)

8 hours lecture/laboratory

Prerequisite: DT/R DT 125 and completion of, or concurrent enrollment in, DT 105

Note: Cross listed as R DT 200; may be taken 2 times

Transfer acceptability: CSU

Advanced techniques in the operation of AutoCAD software for architectural applications on IBM-compatible computers. Preparation of various architectural working drawings from a preliminary residential design.

DT 202 Advanced Computer Aided Architectural Drafting II (4)

8 hours lecture/laboratory

Recommended preparation: DT/R DT 200

Note: Cross listed as R DT 202; may be taken 2 times

Transfer acceptability: CSU

Third-party architectural software for use in conjunction with AutoCAD software. Preparation of 3D architectural models and their manipulation for preparation of individual architectural working drawings including: dimensioned floor plans, building sections, elevations, etc.

DT 210 Printed Circuit Board Design (3)

6 hours lecture/laboratory

Prerequisite: DT 140

Transfer acceptability: CSU

Instruction in printed circuit board design generally required for entry-level positions in the electronic industry. Includes artwork and complete documentation for analog and digital multi-layer, flexible and high-speed boards using current IPC standards. Drafting will be performed on the computer using high-end printed circuit board software.

DT 211 Advanced Printed Circuit Board Design (3)

6 hours lecture/laboratory

Prerequisite: DT 210

Note: May be taken 2 times

Advanced problems and instruction in printed circuit board design generally required for entry-level position in the electronic industry. Special emphasis will be placed on advanced applications including surface mount technology. Includes artwork and complete documentation for analog and digital multi-layer, flexible and high-speed boards using current IPC standards. Drafting will be performed on the computer using AutoCAD and PADS software.

DT 215 Architectural Design Fundamentals I (5)

10 hours lecture/laboratory

Recommended preparation: DT 144 and DT 155

Transfer acceptability: CSU; UC

Development of problem solving and analytical skills in architectural design involving consideration of factors of architectural form in two- and three-dimensional compositions, and design concepts and applications.

DT 216 Architectural Design Fundamentals II (5)

10 hours lecture/laboratory

Recommended preparation: DT 145 and DT 215

Transfer acceptability: CSU; UC

Complex architectural problems involving consideration of factors of structure, site, and climate.

Earth Sciences (ES)

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

COURSE OFFERINGS

ES 100 The Earth as a System (3)

3 hours lecture

Transfer acceptability: CSU; UC

An overview of the fields of geology, geography, oceanography, and astronomy that approach Earth as a system. Areas of study include those related to plate tectonics, earthquakes, volcanoes, geologic time, landscape evolution, weather systems, ocean circulation, climate change, and exploration of the solar system.

ES 105 Earth System Science: Climate Change (3)

3 hours lecture

Transfer acceptability: CSU; UC

Introduction to the science of global change that includes an overview of the international political debate and the mechanisms of the climate system. Topics also examine climate change on different time scales including the Ice Ages and the outlook for climate change.

ES 110 Earth System Science: Life in the Universe (3)

3 hours lecture

Transfer acceptability: CSU; UC

Introduction to astrobiology, a multi-disciplinary field of science that investigates questions related to life on Earth, the nearby Solar System, and the Universe in general. Students will gain an appreciation of many fields of science as they apply to one of the most profound questions one can ask about our world: Are we the only life in the universe?

Economics (ECON)

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

Economics

Provides lower division preparation for pursuing advanced studies in economics or prepares a complementary base for many professions and areas of interest including business administration, law, engineering, journalism, public administration, and environmental studies. Transfer students should consult the four-year college or university catalog for specific requirements or see a Palomar College counselor.

A.A. Degree Major or Certificate of Achievement

Program Requirements

ECON 101	Principles of Economics (Macro)	Units	3
ECON 102	Principles of Economics (Micro)		3

Group I (Select 3 units)

ECON 295	Directed Study in Economics	Units	3
ECON 110	Comparative Economic Systems		3
ECON 115	Economic History of the United States		3
IBUS 100	Intro to Int'l Business Management		3

Group II (Select 7-8 units)

MATH 110	College Algebra	Units	4
MATH 130	Calculus for the Social Sciences		4
MATH 120	Elementary Statistics		3

Group III (Select 6 units)

PHIL 115	Logic and Critical Thinking	Units	3
CSIS 105	Computer Concepts/Microcomputer		3
TOTAL UNITS			22 - 23

COURSE OFFERINGS

ECON 100 Basic Economics (3)

3 hours lecture

Note: Not intended for programs which require *Principles of Economics - ECON 101 and/or 102*

Transfer acceptability: CSU; UC – no credit if taken after ECON 101 or 102

A study of the American economic system as it affects the decision-making of the individual as income earner, taxpayer, and voter. Emphasis is on application of the analyses of supply and demand, productivity, wages and the labor force, the money and banking system, the role of government, and domestic and international economic issues.

ECON 101 Principles of Economics (Macro) (3)

3 hours lecture

Transfer acceptability: CSU; UC; CAN ECON 2

Descriptive analysis of the structure and functioning of the economy of the United States. Emphasizes national income, problems of inflation and unemployment, the role of government, money supply, and economic growth.

ECON 102 Principles of Economics (Micro) (3)

3 hours lecture

Transfer acceptability: CSU; UC; CAN ECON 4

Descriptive analysis of behavior of specific units and individuals. Examines market structures and resource markets under varying degrees of competition. Includes international trade and finance.

ECON 110 Comparative Economic Systems (3)

3 hours lecture

Transfer acceptability: CSU; UC

A study of various types of economic institutions and decision-making systems. Emphasis is given to the theories of capitalism, Marxian economics, and the various types of socialism. The theories will be applied to the study of several countries, including the Soviet Union, Japan, China, Mexico, and a Western European country, as they compare to the United States.

ECON 115 Economic History of the United States (3)

3 hours lecture

Transfer acceptability: CSU; UC

Development of the United States economy from the colonial period to the present. Emphasis will be on the evolution of such institutions as labor unions, business, banking, and government. Economic theory will be used to analyze historical problems.

ECON 197 Economics 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 Economics. See Class Schedule for specific topic offered. Course title will designate subject covered.

ECON 295 Directed Study in Economics (1,2,3)

3, 6, or 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 economics 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.

Education (ED)

Contact Reading Services for further information, (760) 744-1150, ext. 2568

COURSE OFFERINGS

ED 200 Careers in Teaching (3)

3 hours lecture

Transfer acceptability: CSU; UC

An overview of the teaching profession for those students contemplating a career in education. Foundations of education, critical issues in the classroom, and the history and philosophy of education are addressed. Effective and active learning, diversity in the classroom and teaching profession standards are discussed. Guided classroom observations (45 hours) of a K-12 classroom in a variety of subject areas are a requirement for this course.

ED 201 Literacy Instruction (3)

3 hours lecture

Transfer acceptability: CSU

This course is designed for both the student who is considering a career in teaching as well as the prospective literacy tutor. The basic process of literacy acquisition is presented as well as literacy strategies for the emerging and developing reader. The literacy dynamics of a multicultural learning environment will also be presented. 20 hours of literacy training required.

Electro-Mechanical Equipment Technician (EMET)

Contact Occupational & Noncredit Programs for further information, (760) 744-1150, ext. 2284

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

Electro-Mechanical Equipment Technician

Specifically for individuals employed or seeking employment in a medium to large distribution center and to prepare candidates to pass the mail processing equipment (EMET) technician's examination.

Certificate of Achievement

Program Requirements		Units
CI 105	Electrical Codes I	3
CI 106	Electrical Codes II	3
DT 140	Electrical Drafting and Design	3
CSIS 105	Computer Concepts/Microcomputer	3
ECHT 100	Electronic Components and Circuits	4.5
EMET 50	Servicing Electro-Mechanical Equipment	3
EMET 51	Mail Equipment Mechanic Exam Prep	3
Electives (Select 6 units)		
IT 100	Technical Mathematics	3
WELD 100	Welding I	3
ECHT 203	Digital/Computer Electronics	4.5
CE 100*	Cooperative Education	1-4
TOTAL UNITS		28.5

* Cooperative Education must be related to this major.

COURSE OFFERINGS

Courses numbered under 100 are not intended for transfer credit.

EMET 50 Basic Mechanics for Servicing Electro-Mechanical Equipment (3)

3 hours lecture

Recommended preparation: Knowledge of simple algebraic equations; different number systems; different types of gears; mechanical advantage; and fluid dynamics

Provides students with a basic overview of the maintenance process for postal service electro-mechanical equipment. Topics of study include levers and lever assemblies, gears and gear trains, sprockets and pulleys, basic hydraulics.

EMET 51 Mail Processing Equipment Mechanic Exam Preparation (3)

3 hours lecture

Recommended preparation: Technical Mathematics-Ability to perform simple algebraic equations; Electricity-Understand DC and AC fundamentals; Electronics-Understand basic electronic principles; Mechanics-Understand basic mechanic fundamentals; Digital Electronics-Understand basic digital electronic principles.

Designed to prepare students for the U.S. Postal Service Maintenance Mechanic, MPE-7 Entrance Examination. Highly recommended for students interested in a U.S. Postal Service Career focusing on equipment maintenance. Topics will cover all the aspects of mail processing equipment (MPE) maintenance, such as mechanics, electrical, and basic electronic systems.

Electronics and Computer Hardware Technology (ECHT)

Contact Occupational & Noncredit Programs for further information, (760) 744-1150, ext. 2284

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

Electronics Assembler

This certificate is intended to prepare students for immediate employment in the electronics assembly industry as an electronics assembler.

Certificate of Proficiency

Required Courses		Units
ECHT 100	Electronic Components and Circuits	4.5
ECHT 162	Printed Circuit Board Assembly	3
TOTAL UNITS		7.5
Recommended electives: ECHT 20; 160; MATH 15; READ 30, 47, 50; ESL 98.1		

Advanced Electronic Technician

A.A. Degree Major or Certificate of Achievement

Program Requirements (Select one option)		Units
Option One		
ECHT 100	Electronic Components and Circuits	4.5
ECHT 101	Discrete Electronic Circuits	4.5
ECHT 102	Integrated Electronic Circuits	4.5
ECHT 203	Digital/Computer Electronics	4.5
ECHT 204	Microcomputer Architecture	4.5
ECHT 205	Telecommunication Systems	4.5
Option Two		
ECHT 130	Electronic Principles, Components, Circuits	13.5
ECHT 220	Elect Digital Computers,/Telecommunication Sys	13.5

Electives (Select a minimum of 12 units). It is recommended that students include one math course and one English or speech course.

DT/RDT 125	AutoCAD Introduction to Computer Aided Drafting	3
DT 110	Technical Drafting I with AutoCAD	4
DT 140	Electronic Drafting and Design	3
DT 210	Printed Circuit Board Design	3
MATH 60 or	Intermediate Algebra	
MATH 110 or	College Algebra	
MATH 115	Trigonometry	3,4

PHYS 120	General Physics	4
ENG 50 or	Introductory Composition	
ENG 100	English Composition	4
SPCH 100	Oral Communication	3
ENGR 210	Electrical Network Analysis	3
ECHT 126	Introduction to Electrical/Computer Engineering	4
ECHT 160	Electronics for Everyone	3
ECHT 162	Electronic Printed Circuit Board Assembly	3
R CSIS 140	Command Line Operations	3
R CSIS 155	Computer Technology Hardware	3
R CSIS 156	Computer Technology Software	3
R CSIS 160	Introduction to Local Area Networking	3
RCSIS/csis 170	Windows	1
RCSIS/csis 120	Microcomputer Applications	3
TOTAL UNITS		39

Full-time day students are recommended to take the required ECHT courses in the following sequence:

First semester	Second semester
ECHT 130	ECHT 220

Evening students are recommended to take the required ECHT courses in the following sequence: ECHT 100, ECHT 101, ECHT 102, ECHT 203, ECHT 204, ECHT 205.

ECHT 130 is equivalent to ECHT 100, 101, and 102

ECHT 220 is equivalent to ECHT 203, 204, and 205

Computer Hardware/Telecommunication Technician

A.A. Degree Major or Certificate of Achievement

Program Requirements (Select one option)	Units
Option One	
ECHT 100 Electronic Components and Circuits	4.5
ECHT 101 Discrete Electronic Circuits	4.5
ECHT 102 Integrated Electronic Circuits	4.5
ECHT 203 Digital/Computer Electronics	4.5
ECHT 204 Microcomputer Architecture	4.5
ECHT 205 Telecommunication Systems	4.5
Option Two	
ECHT 130 Electronic Principles, Components, and Circuits	13.5
ECHT 220 Electr Digital Computers/Telecommunication Sys	13.5
TOTAL UNITS	27

Full-time day students may earn a certificate in two semesters by completing the required ECHT courses in the following sequence:

First semester	Second semester
ECHT 130	ECHT 220

Evening students are recommended to take the required ECHT courses in the following sequence: ECHT 100, ECHT 101, ECHT 102, ECHT 203, ECHT 204, ECHT 205.

ECHT 130 is equivalent to ECHT 100, 101, and 102

ECHT 220 is equivalent to ECHT 203, 204, and 205

COURSE OFFERINGS

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

ECHT 20 Supplemental Instruction for Electronics and Computer Hardware Technology (1.5)

3 hours lecture/laboratory

Note: May be taken 4 times

Instructor coordinated informal peer assisted study sessions in which students compare notes, discuss readings, review homework, perform laboratory experiments, and work on projects that are associated with any ECHT course. Instructor will provide mini-lessons in direct response to small group assessed needs.

ECHT 100 Electronic Components and Circuits (4.5)

3 hours lecture-3 hours lecture/laboratory

Transfer acceptability: CSU

Fundamentals of DC and AC: Ohm's Law, Kirchoff's Laws, Thevenin's Theorem, magnetism, transformers, capacitance, inductance, and tuned circuits. Laboratory covers application of theory, use of test equipment, circuit design, construction techniques, and troubleshooting carried out through traditional workstation procedures and by computer simulation programs.

ECHT 101 Discrete Electronic Circuits (4.5)

3 hours lecture-3 hours lecture/laboratory

Prerequisite: ECHT 100

Transfer acceptability: CSU

Fundamentals of discrete semiconductors, linear and non-linear, analog: diodes, power supplies, transistors, and amplifiers. Laboratory covers application of theory, use of test equipment, circuit design, reconstruction techniques, and troubleshooting carried out through traditional workstation procedures and by computer simulation programs.

ECHT 102 Integrated Electronic Circuits (4.5)

3 hours lecture-3 hours lecture/laboratory

Prerequisite: ECHT 101

Transfer acceptability: CSU

Fundamentals of linear and non-linear, analog, integrated circuits: thyristors, frequency effects, operational amplifiers, feedback, non-linear OPAMPS, oscillators, power supplies, and communication circuits. Laboratory covers application of theory, use of test equipment, circuit design, construction techniques, and troubleshooting.

ECHT 126 Introduction to Electrical and Computer Engineering (4)

3 hours lecture-3 hours laboratory

Prerequisite: Math 140

Note: Cross listed as ENGR 126

Transfer acceptability: CSU

Introductory concepts covering a broad range of topics in Electrical and Computer Engineering presented in an integrated approach at a hands-on level. Students work in small teams to analyze, build, and test a small programmable robot for competition at the end of the semester. Provides basic understanding and skills for students to later build their theoretical understanding in more advanced physics and engineering courses.

ECHT 130 Electronic Principles, Components, and Circuits (13.5)

9 hours lecture-9 hours laboratory

Transfer acceptability: CSU

Fundamentals of DC and AC: Ohm's Law, Kirchoff's Laws, Thevenin's Theorem, magnetism, transformers, capacitance, inductance, tuned circuits, linear and non-linear, analog, discrete semiconductors; diodes, power supplies, transistors, amplifiers, and integrated circuits; thyristors, frequency effects, operational amplifiers, feedback, non-linear OPAMPS, oscillators, power supplies, and communication circuits. Laboratory covers application of theory, use of test equipment, circuit design, construction techniques and troubleshooting carried through traditional workstation procedures and by the computer simulation program.

ECHT 160 Electronics for Everyone (3)

3 hours lecture

Transfer acceptability: CSU

Overview course designed and taught so anyone can understand the basic concepts and applications of electronics. Topics covered are direct and alternating current, Ohm's Law, magnetism, transformers, capacitance, inductance, tuned circuits, diodes, transistors, amplifiers, oscillators, power supplies and computers.

ECHT 162 Electronic Printed Circuit Board Assembly and Equipment Troubleshooting (3)

2 hours lecture-2 hours lecture/laboratory

Note: May be taken 4 times

Transfer acceptability: CSU

Fundamentals of printed circuit board assembly: workmanship standards and forms, surface mount and through hole technology, and solder training. Hands-on training on the repair and troubleshooting of electronic equipment.

ECHT 197 Electronics and Computer Hardware Technology Topics (.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

Topics in Electronics and Computer Hardware Technology. See Class Schedule for specific topic offered. Course title will designate subject covered.

ECHT 203 Digital/Computer Electronics (4.5)

3 hours lecture-3 hours lecture/laboratory

Recommended preparation: ECHT 100**Transfer acceptability:** CSU

Fundamental logic functions of AND'ing, OR'ing, and inverting will be studied in various combinational and sequential logic circuits such as: encoders, decoders, multiplexers, demultiplexers, flip-flops, registers, counters, clocks, memories, and microprocessors. The architecture and programming of the digital microprocessor will be emphasized. The primary components required for proper operation of a PC (personal computer) will be addressed. Designing, testing, and troubleshooting of computers and special projects.

ECHT 204 Microcomputer Architecture and Interfacing (4.5)

3 hours lecture-3 hours lecture/laboratory

Prerequisite: ECHT 203**Transfer acceptability:** CSU

Advanced computer electronic concepts and applications using digital circuits and systems. Interfacing of microprocessors and PC's (personal computers) to peripherals. Upgrading of desktop PC's. Designing, testing, and troubleshooting of computer systems and special projects.

ECHT 205 Telecommunication Systems (4.5)

3 hours lecture-3 hours lecture/laboratory

Recommended preparation: ECHT 102 and 203**Transfer acceptability:** CSU

Review of basic electronic analog and digital principles. Communication of information using analog/digital electronic transmission lines, antennas, testing and troubleshooting, as they relate to RADIO, RADAR, TV, Computers, Modems, Networks (Internet, World Wide Web [WWW]), Satellites, Cellular phones, and Fiber optic systems, will be addressed.

ECHT 220 Electronic Digital Computers and Telecommunication Systems (13.5)

9 hours lecture-9 hours lecture/laboratory

Prerequisite: ECHT 130**Transfer acceptability:** CSU

Fundamental logic functions will be studied in various combinational and sequential logic circuits. The architecture and programming of the digital microprocessor will be emphasized. Interfacing of microprocessors and PC's (personal computers) to peripherals. Upgrading of desktop PC's. Designing, testing, and troubleshooting of computer systems and special projects. Communication of information using analog/digital electronic circuits and systems. AM, FM, PM modulation techniques, transmission lines, antennas, testing and troubleshooting, as they relate to radio, radar, TV, computers, modems, networks (Internet, World Wide Web [WWW]), satellites, cellular phones, and fiber optic systems will be addressed.

Emergency Medical Education (EME)

Contact the Emergency Medical Education Department for further information, (760) 744-1150, ext. 8150

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

College Credit for Certified Paramedics

This policy is for granting college credit for certified paramedics toward an Associate in Arts degree in Emergency Medical Technician-Paramedic. In order for an already certified Paramedic to be granted college units for his/her certification, the following requirements must be met:

1. The EMT-P must be currently certified in California as an EMT-P.
2. The EMT-P must be currently registered at Palomar College.

EMT-P Credit

1. The student may receive a maximum of 31 units for his/her EMT-P training, which is equal to the number of units given at Palomar College for the EMT-P courses.
2. The student may receive a maximum of 6 units for

his/her former EMT-1 training, which is equal to the number of units given at Palomar College for the EMT-1 courses.

3. The student may not receive duplicate credit for any other EMT-1 or EMT-P courses.

Degree Requirements

The Associate in Arts degree in Emergency Medical Technician-Paramedic requires 60 units. The following criteria must be met:

1. 30 units must be issued by an accredited college on a letter grade basis, of which 12 units must be completed at Palomar College.
2. All other general education and competency requirements for the Associate in Arts degree as provided in the college catalog must be met.
3. When the student has completed the general education and competency requirements for the Associate in Arts degree and the 12 units required to be completed at Palomar College, the student will be awarded unit credit for education/training received in becoming an EMT-P.

Paramedics interested in taking advantage of this policy should contact the Emergency Medical Education Department at (760) 744-1150, extension 8150. Paramedics will be required to provide a copy of his or her paramedic license and course completion certificate for verification of paramedic licensure. Paramedics must also send prior college transcripts to the college and make an appointment with the Counseling Department at (760) 744-1150, ext. 2179 for evaluation of general education requirements.

PROGRAMS OF STUDY

Emergency Medical Technician Basic

The Emergency Medical Technician Program prepares the student in all elements of pre-hospital Basic Life Support. Upon successful completion of the program, the student is eligible to take the San Diego County EMT-Basic certification exam, which is the National Registry Emergency Medical Technician Basic exam.

Required Courses		Units
EME 100/		
PE104	Advanced First Aid	3
EME 106	EMT Basic (Lecture)	6
EME 106L	EMT Basic Skills (Laboratory)	1

Paramedic Training

The Paramedic Program prepares the student in all elements of prehospital advanced life support. Upon successful completion of the program, the student is eligible to take the State of California EMT-P certification exam, which is the National Registry Emergency Medical Technician-Paramedic Exam.

Admission to the program is by special application.

To be eligible for consideration, the applicant must:

1. Have six months full-time pre-hospital experience as an EMT-Basic.
 2. Be eligible for admission to Palomar College.
 3. Meet academic requirements outlined in the Paramedic Program brochure produced by the EME Program.
- AND**
4. Have completed ZOO 145 and the EME 175 & EME 175L with a grade of "C" or better.

Prerequisite Courses		Units
ZOO 145	Intro to Anatomy/Physiology	3
EME 106	EMT Basic (Lecture)	6
EME 106L	EMT Basic Skills (Laboratory)	1
EME 175	Paramedic Preparation (Lecture)	2
EME 175L	Paramedic Preparation Skills (Laboratory)	1

A.A. Degree Major or Certificate of Achievement

Students must achieve a minimum score of 80% in each of the required courses in order to continue in the program.

Program Requirements		Units
EME 206	Intro/Paramedic Training (Lecture)	4
EME 206L	Intro/Paramedic Training (Laboratory)	1
EME 207	Paramedic Medical Training (Lecture)	10
EME 207L	Paramedic Medical Skills (Lab)	1.5
EME 208	Paramedic Trauma Training (Lecture)	4.5
EME 208L	Trauma Skills (Laboratory)	.5
EME 209	Paramedic Obstetrical/Pediatric Training (Lecture)	2.5
EME 209L	Paramedic Obstetrical/Pediatric Skills (Lab)	.5
EME 210	Hospital Clinical Experience	4
EME 215	Field Internship	9
TOTAL UNITS		37.5

COURSE OFFERINGS

Courses numbered under 100 are not intended for transfer credit.

EME 55 CPR for Health Care Providers (.5)

½ hour lecture

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

Basic cardio-pulmonary resuscitation (CPR) course for one person CPR, two person CPR, child CPR, infant CPR, obstructed airway and mouth-to-mask ventilation based on American Heart Association standards.

EME 100 Advanced First Aid (3)

3 hours lecture

Note: Cross listed as PE 104

Transfer acceptability: CSU; UC

The study and application of emergency medical skills and procedures, including basic anatomy and physiology, terminology, and prevention of disease transmission, for CPR certification from the American Heart Association and/or the American Red Cross.

EME 106 Emergency Medical Technician Basic (Lecture) (6)

6 hours lecture

Prerequisite: Current BLS course CPR card and Emergency Response card, or EME 100. Proof of meeting the prerequisite will be required at the first class meeting

Corequisite: EME 106L

Note: May be taken 2 times

The study of EMT theory and knowledge required for identification and treatment of pre-hospital emergencies. The course prepares the student for National Registry, California and San Diego County EMT-Basic certification.

EME 106L Emergency Medical Technician Basic Skills (Laboratory) (1)

3 hours laboratory

Prerequisite: Current CPR for Health Care Providers CPR and Emergency Response card or EME 100

Corequisite: EME 106

Note: Credit/No Credit grading only; may be taken 2 times

Application of skills required for treatment of pre-hospital emergencies. This course prepares the student for National Registry, California and San Diego County EMT-Basic certification. Student is required to complete 16 hours supervised ambulance and emergency department observation.

EME 116 Emergency Medical Technician Refresher Course (1.5)

1 ½ hour lecture

Prerequisite: Possess a valid current EMT-B, EMT-II or EMT-P certificate, or have possessed one within the last four years.

Note: Credit/No Credit grading only

Review of basic EMT material and update of new material and techniques. Meets State of California requirements for EMT-B recertification continuing education units. An Optional NREMT-B Recertification Exam available the day after the class ends.

EME 175 Paramedic Preparation (2)

2 hours lecture

Prerequisite: Current EMT with a minimum of 3 months full time

pre-hospital experience.

Corequisite: EME 175L

An overview of paramedic-level assessment skills combined with appropriate paramedic-level anatomy, physiology, and treatment relevant to the disease processes studied.

EME 175L Paramedic Preparation Skills (Laboratory) (1)

3 hours laboratory

Prerequisite: Current EMT with a minimum of 3 months full time pre-hospital experience

Corequisite: EME 175

Note: Credit/No Credit grading only

Performance of EMT skills combined with appropriate paramedic-level anatomy, physiology and treatment relevant to the disease processes studied.

EME 196 Special Problems in Field Internship (3-5)

9 to 15 hours laboratory

Corequisite: EME 210 or EME 215

Application of skills and knowledge necessary for student to successfully complete either the Clinical or Field Internship of Paramedic Training. This is for a student who needs to be extended up to 10 shifts to allow fulfillment of EME 210 or 215 course obligations and requires an individual student specific contract.

EME 197A Emergency Medical Education Workshop: Emergency Medical Technician-Paramedic (.5-6)

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

Workshops to provide upgrading of knowledge and skills relative to paramedics. Will provide paramedic continuing education hours for classroom time. See Class Schedule for specific topic covered. Course title will designate subject covered.

EME 197B Emergency Medical Education Workshop: Emergency Medical Technician-Basic (.5-6)

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

Workshops to provide upgrading of knowledge and skills relative to EMT's. Will provide EMT continuing education hours for classroom time as indicated by topic. See Class Schedule for specific topic covered. Course title will designate subject covered.

EME 197E Emergency Medical Education Workshop: General (.5-6)

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

Innovative and creative aspects updating Emergency Medical Education professions. Topics relative to the fields.

EME 200 Advanced Cardiac Life Support (1)

1 hour lecture

Prerequisite: Current CPR for Health Care Providers Certificate or "BLS" CPR card and must be an M.D., R.N. or EMT-P

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

Advanced Cardiac Life Support knowledge and skills necessary to provide the appropriate early treatment for cardiopulmonary arrest. Based on current American Heart Association guidelines.

EME 201 Pediatric Advanced Life Support (1)

1 hour lecture

Prerequisite: Current CPR for Health Care Providers Certificate or "BLS" CPR card and must be an M.D., R.N., or EMT-P

Note: May be taken 3 times

Pediatric Advanced Life Support knowledge and skills necessary to provide the appropriate early treatment for pediatric emergencies. Based on current American Heart Association guidelines.

EME 202 Prehospital Trauma Life Support (1)

1 hour lecture

Prerequisite: Current CPR for Health Care Providers Certificate or "BLS" CPR card and must be an M.D., R.N. or EMT-P**Note:** Credit/No Credit grading only; may be taken 3 times

Knowledge and skills taught to provide prehospital trauma life support appropriate for the care of the trauma patient. National Association of Emergency Medical Technicians based course.

EME 203 Paramedic Challenge (Lecture) (2)

2 hours lecture

Prerequisite: RN, MD, PA or former Paramedic who meets State of California challenge requirements**Corequisite:** EME 203L**Note:** Credit/No Credit grading only; may be taken 2 times

Didactic challenge course for individuals who qualify for Paramedic Challenge per State of California Code of Regulations, Title 22. Allows the individual to attend the didactic portion of Paramedic training as needed to meet paramedic course content per individual student contract.

EME 203L Paramedic Challenge Skills (Laboratory) (.5)

1 ½ hours laboratory

Prerequisite: RN, MD, PA or former Paramedic who meets State of California challenge requirements**Corequisite:** EME 203**Note:** Credit/No Credit grading only; may be taken 2 times

Application of skills necessary for challenge course for individuals who qualify for Paramedic Challenge per State of California Code of Regulations, Title 22. Allows the individual to attend the skills portion of Paramedic Training as needed to meet paramedic course content per individual student contract.

EME 206 Introduction to Paramedic Training (Lecture) (4)

4 hours lecture

Prerequisite: Admission into Paramedic program**Corequisite:** EME 206L**Note:** May be taken 2 times

Introduction to Paramedic training which meets the requirements of the National Standard Curriculum for Paramedic Training.

EME 206L Introduction to Paramedic Training (Laboratory) (1)

3 hours laboratory

Prerequisite: Admission into Paramedic program**Corequisite:** EME 206**Note:** Credit/No Credit grading only; may be taken 2 times

Application of skills used in the Introduction to Paramedic Training which meets the requirements of the National Standard Curriculum for Paramedic Training.

EME 207 Paramedic Medical Training (Lecture) (10)

10 hours lecture

Prerequisite: Admission into Paramedic program**Corequisite:** EME 207L**Note:** May be taken 2 times

The study of medical diseases for Paramedic training which meets the requirements of the National Standard Curriculum for Paramedic Training. Includes ACLS training and certification.

EME 207L Paramedic Medical Skills (Laboratory) (1.5)

4 ½ hours laboratory

Prerequisite: Admission into Paramedic program**Corequisite:** EME 207**Note:** Credit/No Credit grading only; may be taken 2 times

Application of skills necessary for the medical portion of Paramedic Training which meets the requirements of the National Standard Curriculum for Paramedic Training.

EME 208 Paramedic Trauma Training (Lecture) (4.5)

4 ½ hours lecture

Prerequisite: Admission into Paramedic program**Corequisite:** EME 208L**Note:** May be taken 2 times

The study of traumatic emergencies for Paramedic training which meets the requirements of the National Standard Curriculum for

Paramedic Training. Includes Pre-hospital Trauma Life Support training and certification.

EME 208L Trauma Skills (Laboratory) (.5)

1 ½ hours laboratory

Prerequisite: Admission into Paramedic program**Corequisite:** EME 208**Note:** Credit/No Credit grading only; may be taken 2 times

Application of skills necessary for trauma class of Paramedic training which meets the requirements of the National Standard Curriculum for Paramedic Training. Includes Pre-hospital Trauma Life Support training and certification.

EME 209 Paramedic Obstetrical and Pediatric Training (Lecture) (2.5)

2 ½ hours lecture

Prerequisite: Admission into Paramedic program**Corequisite:** EME 209L**Note:** May be taken 2 times

The study of Obstetrical and Pediatric emergencies for Paramedic training which meets the requirements of the National Standard Curriculum for Paramedic Training. Includes Pediatric Education for Pre-hospital Professionals.

EME 209L Paramedic Obstetrical and Pediatric Skills (Laboratory) (.5)

1 ½ hours laboratory

Prerequisite: Admission into Paramedic program**Corequisite:** EME 209**Note:** Credit/No Credit grading only; may be taken 2 times

Application of skills necessary for the Obstetrical and Pediatric class for Paramedic Training which meets the requirements of the National Standard Curriculum for Paramedic Training. Includes Pediatric Education for Pre-hospital Professionals.

EME 210 Hospital Clinical Experience (4)

12 hours laboratory

Prerequisite: EME 209 and EME 209L**Note:** May be taken 2 times

Supervised clinical experience in acute care areas of hospitals where knowledge of advanced life support techniques is necessary.

EME 215 Field Internship (9)

28 hours laboratory

Prerequisite: EME 210**Note:** May be taken 2 times

Assignment to a response vehicle with a field preceptor. Includes direct patient care responsibilities in providing advanced life support.

EME 295 Directed Study in Emergency Medical Education (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

Independent study for students who have demonstrated skills and/or proficiencies in Emergency Medical Education 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.

Engineering (ENGR)

Contact the Physics and Engineering Department for further information, (760) 744-1150, ext. 2505

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

Engineering

Provides the background to begin upper division coursework and will prepare the student for entry-level jobs that require a knowledge of engineering and engineering related topics. The highly sequential nature of the engineering curriculum necessitates completion of lower division requirements before being admitted into upper division courses.

Engineering students are urged to give priority to the completion of major field requirements over the completion of general education requirements. Engineering lower division requirements are not the same for different universities. These institutions recommend that their particular lower division requirements be completed before transfer. Students should seek early assistance in planning their specific program from the Counseling Department, the Transfer Center, or the Physics/Engineering Department.

A.A. Degree Major

Program Requirements

(Select a minimum of 11 units)

ENGR 125	Engineering Graphics	3
ENGR/		
ECHT 126	Intro Electric/Computer Engineering	4
ENGR 210	Electrical Network Analysis	3
ENGR 210L	Electrical Network Analysis Laboratory	1
ENGR 231	Engineering Measurement Analysis	3
ENGR 235	Engineering Mechanics - Statics	3
ENGR 236	Engineering Mechanics - Dynamics	3
ENGR 245	Properties of Materials	3

Electives (Select a minimum of 30 units)

Note that mathematics courses are often prerequisite to engineering and physics courses.

MATH 140*	Calculus/Analytic Geometry, First Course	5
MATH 141	Calculus/Analytic Geometry, Second Course	4
MATH 205	Calculus/Analytic Geometry, Third Course	4
MATH 206	Calculus with Differential Equations	4
PHYS 230*	Principles of Physics	5
PHYS 231	Principles of Physics	5
PHYS 232	Principles of Physics	4
CHEM 110*	General Chemistry	3
CHEM 115*	General Chemistry	3
CHEM 110L*	General Chemistry Laboratory	2
CHEM 115L*	General Chemistry Laboratory	2

MINIMUM TOTAL UNITS

41

Recommended Elective: ENGR 100

* Courses marked with an asterisk may be used to fulfill General Education requirements. ENG 100, ENG 202, and BIOL 100 are highly recommended as electives to fulfill General Education requirements.

COURSE OFFERINGS

ENGR 100 Introduction to Engineering (1)

1 hour lecture

Transfer acceptability: CSU; UC

An overview of the engineering profession including not only the different engineering fields but also the specialized demands and rewards of each. It will afford the opportunity for community building among the students, who usually are otherwise isolated in the community college milieu. Group projects in the course will encourage socialization and human relations training in what is often perceived as a dry and dull profession. Academic success strategies will be explained and practiced; ethical concepts will be examined through case histories and practical applications.

ENGR 125 Engineering Graphics (3)

2 hours lecture-3 hours laboratory

Transfer acceptability: CSU; UC

Fundamental principles of orthogonal projection and their application to the solution of three-dimensional problems arising in the various branches of engineering, free-hand and instrumental working drawings, and graphic computations.

ENGR 126 Introduction to Electrical and Computer Engineering (4)

3 hours lecture-3 hours laboratory

Prerequisite: Math 140

Note: Cross listed as ECHT 126

Transfer acceptability: CSU

Introductory concepts covering a broad range of topics in Electrical and Computer Engineering presented in an integrated approach at a hands-on level. Students work in small teams to analyze, build, and test a small programmable robot for competition at the end of the semester. Provides basic understanding and skills for

students to later build their theoretical understanding in more advanced physics and engineering courses.

ENGR 197 Engineering Topics (.5-5)

Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of, 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 Engineering. See Class Schedule for specific topic offered.

Course title will designate subject covered.

ENGR 210 Electrical Network Analysis (3)

3 hours lecture

Prerequisite: Completion of, or concurrent enrollment in, both ENGR 210L and PHYS 231

Transfer acceptability: CSU; UC; CAN ENGR 12

Circuit analysis by reduction methods, source transformations, loop and nodal analysis, OPAMP model for networks, transient analysis, alternating current circuits, impedance, power and phasor diagrams.

ENGR 210L Electrical Network Analysis Laboratory (1)

3 hours laboratory

Prerequisite: Completion of, or concurrent enrollment in, ENGR 210

Transfer acceptability: CSU; UC

Laboratory exercises of circuit analysis by reduction methods, source transformations, loop and nodal analysis, OPAMP model for networks, transient analysis, alternating current circuits, impedance, power and phasor diagrams.

ENGR 231 Engineering Measurement Analysis (3)

2 hours lecture-3 hours laboratory

Prerequisite: MATH 140

Transfer acceptability: CSU; UC

Analysis and treatment of engineering data. Probability, statistics, error theory, correlation and regression analysis, dimensional analysis, data processing, and preparation of technical reports. Laboratory experiments in hydraulic flow, surveying, heat transfer, and static and dynamic test systems.

ENGR 235 Engineering Mechanics – Statics (3)

3 hours lecture

Prerequisite: PHYS 230 and MATH 140

Transfer acceptability: CSU; UC; CAN ENGR 8

Force systems and equilibrium conditions. Engineering problems covering structures, machines, distributed forces, and friction. Graphical and algebraic solutions, and vectorial analysis.

ENGR 236 Engineering Mechanics – Dynamics (3)

3 hours lecture

Prerequisite: ENGR 235

Transfer acceptability: CSU; UC

Fundamental principles of bodies in motion; kinetics and kinematics of particles; system of particles; central force; work and energy; linear and angular momentum; moments and products of inertia; vibrations and time response; engineering applications.

ENGR 245 Properties of Materials (3)

2 hours lecture-3 hours laboratory

Prerequisite: CHEM 110 and 110L

Transfer acceptability: CSU; CAN ENGR 4

Physical properties of engineering materials. Atomic, molecular, and crystal-lattice characteristics. Relations between these and mechanical, thermal, electrical, corrosion, and radiation properties. Metallic, ceramic, polymer, and agglomerate materials. Selection, treatment, and use of materials.

ENGR 295 Directed Study in Engineering (1,2,3)

3, 6, or 9 hours laboratory

Prerequisite: Approval of project or research by department chairperson

Note: May be taken 4 times

Transfer acceptability: CSU

Designed for the student who has demonstrated a proficiency in engineering subjects and the initiative to work independently on a particular sustained project which does not fit into the context of regularly scheduled classes.

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

ENG 205 Introduction to Literature

Units

3

Elective Courses (Select 9 units)

ENG 135 Introduction to Creative Writing
ENG 136 Intermediate Creative Writing
ENG 210 Survey of British Literature I
ENG 211 Survey of British Literature II
ENG 220 Survey of World Literature I
ENG 221 Survey of World Literature II
ENG 225 Literature of the United States I
ENG 226 Literature of the United States II

4

4

3

3

3

3

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3

Elective Courses (Select 6 units) Any of the above courses not previously taken or pick from the following courses:

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

3

4

3

3

3

3

3

3

3

3

3

TOTAL UNITS

18

* Pending Chancellor's Office approval at time of catalog publication.

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 1 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 1 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 (3.0)

3 hours lecture

Instruction in editing of written material by applying conventions of standard written English.

ESL 30 Computer Literacy for ESL Students (2)

4 hours lecture/laboratory

Development of reading and writing skills through computers, focusing on vocabulary specific to using computers. Includes basic word processing, spreadsheet, database and graphic commands and 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	3
ENTT/TA 107	Special Effects of Light and Sound	3
ENTT/TA 108	Stagecraft/Scene Design	3
ENTT/RTV 120	Basic Television Production	3
ENTT/RTV 130	Radio Production	3
ENTT/RTV 294B	or Television Internships/Production	
TA 197D	Stage Crew Workshop	1
TOTAL UNITS		16

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 Special Effects of Light and Sound (3)

2 hours lecture-4 hours laboratory

Note: Cross listed as TA 107**Prerequisite:** ENTT 105 /TA 105**Transfer acceptability:** CSU; UC

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

ENTT 108 Stagecraft/Scene Design (3)

2 hours lecture-4 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 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.

ENTT130 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/HE 165	Fundamentals of Nutrition	3
FCS 136	Personal Finance	3
FASH 110	Textiles	3
FASH 135	Basic Sewing Construction	3
ID 100	Interior Design	3
CHDV 100	or Child Development	
PSYC 110	Developmental Psychology – Child Through Adult	3
TOTAL UNITS		24

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. CSU

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

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/BUS	145 Fashion Illustration and Presentation	3
FASH	195 Field Studies in Fashion	2
CE	150 Internship	1-4
TOTAL UNITS		24 - 27

Recommended Electives: FASH 143, 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
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	165 Fashion Laboratory	.5,1
FASH	195 Field Studies in Fashion	2
CE	150 Internship	2-3
TOTAL UNITS		31.5 – 33

Recommended Electives: FASH 125, 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/BUS	125 Retailing/Promotion	3
FASH	195 Field Studies in Fashion	2
CE	150 Internship	2-3
TOTAL UNITS		19 - 20

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
TOTAL UNITS		9

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		Units
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	Retailing/Promotion	3
FASH 126	Fashion Show Promotion	1
FASH 130	History of Fashion/Costume	3
FASH/BUS 145	Fashion Illustration	3
FASH 195	Field Studies in Fashion	2
CE 150	Internship	2-3
TOTAL UNITS		29 - 30

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

COURSE OFFERINGS

Courses numbered under 100 are not intended for transfer credit.

FASH 80 Serger Sewing (5)

1 hour lecture/laboratory

Recommended preparation: FASH 135

Note: May be taken 2 times

Basic serger (overlock) sewing machine operation for construction and embellishment.

FASH 81 Serger Sewing II (5)

1 hour lecture/laboratory

Recommended preparation: FASH 135

Note: May be taken 2 times

Serger (overlock) sewing machine operation for construction and embellishment beyond the introductory level.

FASH 90 Design Collection (1)

2 hours lecture/laboratory

Recommended preparation: At least one of the following courses:

FASH 135, 136, 139, 140, 145

Note: 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.

FASH 91 Pattern Grading (5)

1 hour lecture/laboratory

Recommended preparation: FASH 135, 139

Note: 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.

FASH 100 Fashion Industry (3)

3 hours lecture

Transfer acceptability: 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.

FASH 105 Fashion Analysis and Clothing Selection (3)

3 hours lecture

Transfer acceptability: CSU; CAN FCS 20

Examines fashion as it relates to wardrobe planning, coordination, and standards of quality garment construction.

FASH 110 Textiles (3)

3 hours lecture-1 hour laboratory

Transfer acceptability: CSU; CAN FCS 6

Fibers, yarn, fabric construction, and finishes as related to selection, use, and care.

FASH 115 Visual Merchandising I (3)

3 hours lecture-1 hour laboratory

Transfer acceptability: CSU

Visual merchandise presentation including window and interior displays, elements of design, principles of design, fixtures, lighting, and other display materials.

FASH 116 Visual Merchandising II (3)

3 hours lecture-1 hour laboratory

Transfer acceptability: 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.

FASH 120 Fashion Buying/Management (3)

3 hours lecture

Transfer acceptability: 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.

FASH 125 Retailing/Promotion (3)

3 hours lecture

Note: Cross listed as BUS 145

Transfer acceptability: 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.

FASH 126 Fashion Show Presentation (1)

2 hours lecture/laboratory

Note: May be taken 2 times

Transfer acceptability: 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.

FASH 130 History of Fashion/Costume (3)

3 hours lecture

Transfer acceptability: CSU

Styles of dress from the Paleolithic period to the present as depicted in art forms and other media. Focuses on Western European costume.

FASH 131 Elementary Stage Costume and Make-Up (3)

2 hours lecture-3 hours laboratory

Transfer acceptability: CSU

Basic theories, techniques, and procedures of costume production and make-up application for stage, film, and television. Practical training in college productions.

FASH 132 Costume and Culture**(3)***3 hours lecture***Transfer acceptability:** 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

FASH 135 Basic Sewing Construction**(3)***6 hours lecture/laboratory***Note:** May be taken 2 times**Transfer acceptability:** CSU

Traditional construction techniques. Quality garments will be produced utilizing new speed techniques as well as hand detailing.

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 dressmaker'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 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***Prerequisite:** FASH 140**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.

PROGRAM OF STUDY**Fire Technology**

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

Elective Courses (Select 15 units)

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
FIRE 125	Fire Apparatus and Equipment	3
FIRE 140	Fire Technology Records and Reports	3
FIRE 145	Fire Fighting Tactics and Strategy	3
FIRE 150	Fire Vehicle Maintenance	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 1A	2
FIRE 176	Fire Command 1B	2
FIRE 180	Fire Prevention 1A	2
FIRE 181	Fire Prevention 1B	2
FIRE 185	Fire Management I	2
FIRE 190	Fire Investigation 1A	2
FIRE 193	Fire Instructor 1A	2
FIRE 194	Fire Instructor 1B	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	6
CE 100	Cooperative Education	1,2,3,4
TOTAL UNITS		31

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 (.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 (.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 (.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 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-1, 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 1A (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 1B (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 1A (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 1B (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 1A (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 1A (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 1B (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)

1 to 10 hours lecture/laboratory

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)

1 to 10 hours lecture/laboratory

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)

1 to 10 hours lecture/laboratory

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)

3 hours lecture

Transfer acceptability: CSU; UC – FREN 101A and 101B combined: maximum credit, 5 units; UC – both courses must be taken for transfer credit to be given

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)

3 hours lecture

Prerequisite: FREN 101A or one year of high school French

Transfer acceptability: CSU; UC – FREN 101A and 101B combined: maximum credit, 5 units; UC – both courses must be taken for transfer credit to be given

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)

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.

9/15/05 AND 2-2-05

FREN 102A French IIA (3)

3 hours lecture

Prerequisite: FREN 101 or 101B or two years of high school French

Transfer acceptability: CSU; UC – FREN 102A and 102B combined: maximum credit, 5 units; UC – both courses must be taken for transfer credit to be given

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)

3 hours lecture

Prerequisite: FREN 101 OR 101B or two years of high school French

Transfer acceptability: CSU; UC – FREN 102A and 102B combined: maximum credit, 5 units; UC – both courses must be taken for transfer credit to be given

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 131 French Civilization (3)
3 hours lecture

Transfer acceptability: CSU; UC

A multi-media presentation of the humanistic achievements of the civilization of France from the Renaissance to the Fifth Republic.

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)
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.

FREN 215 Advanced French (3)
3 hours lecture

Prerequisite: FREN 202

Transfer acceptability: CSU; UC

Continuation of the French sequence. Intensive practice in spoken French; review of essentials of French grammar and composition.

FREN 296 Special Studies in French (1,2,3)
1, 2 or 3 hours lecture

Note: May be taken 4 times for a maximum of 6 units

Transfer acceptability: CSU

Improve French language competency and cultural awareness through individualized study, lectures or cultural activities.

General 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

General Studies

This program is designed for students who may not be planning to transfer to a four-year college and who need to explore possibilities before committing themselves to a major program. The program may serve the purposes of students who have been out of school and who need to review and assess their academic skills and interests before deciding on a definite major program. Students planning to transfer to a four-year institution are cautioned that this curriculum may not provide for completion of the lower-division requirements for transfer to a four-year institution.

Only one course may double-count between the A.A. general education requirements and the selected emphasis. Students may receive only one General Studies major.

A.A. Degree Major

Select One Emphasis:

Emphasis in Arts and Humanities

(Select 18 units minimum)

AIS 100, 105, 135, 141, 142, 143, 144, 145, 150, 151, 152, 153, 154
AMS 100
ANTH 135, 155
ART 100, 102, 104, 105, 165, 166, 167, 168,
AS 100, 115, 116
ASL 100, 101, 110, 205, 206
CHIN 101, 101A, 101B, 102, 102A, 102B, 130, 201, 201A, 201B
CINE 100, 102, 103, 110, 120
CS 100, 105, 110, 115, 155
DNCE 100, 101, 105
DT 120
ENG 202, 203, 205, 210, 211, 215, 220, 221, 225, 226, 230, 240, 245, 250, 255, 260, 265, 270, 280, 290
ESL 101, 102, 103
FASH 130, 132
FREN 101, 101A, 101B, 102, 102A, 102B, 131, 140, 201, 202
GERM 101, 101A, 101B, 102, 102A, 102B, 201, 202
HIST 105, 106
HUM 100, 101, 150
ID 115
ITAL 101, 102, 201, 201A, 201B
JAPN 101, 101A, 101B, 102, 201, 202
JOUR 101
JS 100
LT 154
MUS 100, 101, 102, 103, 166, 167, 170, 171
PHIL 100, 101, 102, 105, 110, 115, 120, 255
PHOT 100, 125
READ 110, 120
RS 101, 105, 110, 120
RTV 100
SPAN 101, 101A, 101B, 102, 102A, 102B, 201, 201A, 201B, 202, 240, 241
SPCH 100, 105, 115, 125
TA 100, 125, 140, 141
TAG 101, 102, 201,

Emphasis in Science and Mathematics

(Select 18 units minimum*)

ANTH 100
ASTR 100, 120
BIOL 100, 101, 102, 105, 106, 107, 110, 114, 118, 130, 131, 185, 200, 201
BOT 100, 101, 110, 115
BUS 110
CHEM 100, 102, 110, 115, 210
ENGR 210
ES 100
FCS 185
GEOG 100, 110, 115, 125

GEOL 100, 110, 120, 125, 150
 MATH 56, 60, 100, 105, 110, 115, 120, 130, 135, 140, 200
 MICR 200
 OCN 100, 101, 115
 PHSC 100, 101
 PHYS 101, 102, 120, 200, 201, 230
 PSYC 205, 210
 SOC 205
 ZOO 100, 101, 115, 116, 120, 145, 200, 203, 205

*Although not listed, related lab courses may be included as part of the 18 unit minimum.

Emphasis in Social and Behavioral Sciences

(Select 18 units minimum)

AIS 101, 102, 120, 125, 130, 140, 165
 AJ 100
 ANTH 105, 110, 115, 125, 126, 130, 140, 145, 150
 AMS 110, 200
 AS 101, 102, 110, 120, 125, 126
 CHDV 100, 110, 115
 COMM 100, 105
 COUN 100, 120
 CS 101, 102, 120, 125
 ECON 100, 101, 102, 110, 115
 ENG 150
 FCS 101, 105
 GEOG 103, 105
 GERO 120
 HIST 101, 102, 107, 108, 110, 114, 130, 140, 141, 150, 151, 152
 JS 105
 LS 121, 240
 MCS 100, 110, 165, 200
 PLS 121, 240
 POSC 100, 101, 102, 110, 115
 PSYC 100, 105, 110, 115, 120, 125, 130, 145
 SOC 100, 105, 110, 115, 120, 125, 145, 200
 SPCH 120, 131

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 134 GIS Applications	2
GEOG 136 Intermediate ArcGIS: GIS Analysis	2
GEOG 138 GIS Internship	2
TOTAL UNITS	14

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 (4)

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 Units****Group One**

GEOL 100	Basic Geology	3
GEOL 100L	Basic Geology Laboratory	1
GEOL 150	Dinosaurs and Earth History	3
GEOL 150L	Dinosaurs and Earth History Laboratory	1
GEOL 195	Regional Field Studies in Geology	2

Group Two (Select at least two sets of courses listed below)**Set 1**

MATH 140 and Calculus/Analytic Geometry, First Course	5
MATH 141 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 115	General Chemistry	3
CHEM 110L	General Chemistry Laboratory	2
CHEM 115L	General Chemistry Laboratory	2

Group Three (Select at least 8 units)

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

COURSE OFFERINGS**GEOL 100 Basic Geology (3)**

3 hours lecture

Note: Together with GEOL 150, a prerequisite to upper division courses in Geology.**Transfer acceptability:** CSU; UC; CAN GEOL 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.

GEOL 100L Basic Geology Laboratory (1)
 3 hours laboratory
Prerequisite: Completion of, or concurrent enrollment in, GEOL 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.

GEOL 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.

GEOL 120 Planets, Moons, and Comets (4)
 3 hours lecture
Note: Cross listed as ASTR 120
Transfer acceptability: CSU; UC – ASTR/GEOL 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)
 3 hours lecture
Transfer acceptability: CSU; UC – GERM 101A and 101B combined: maximum credit, 5 units; UC – both courses must be taken for transfer credit to be given

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)
 3 hours lecture
Prerequisite: GERM 101A or one year of high school German
Transfer acceptability: CSU; UC – GERM 101A and 101B combined: maximum credit, 5 units; UC – both courses must be taken for transfer credit to be given
 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)
 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)
 3 hours lecture
Prerequisite: GERM 101 or 101B or two years of high school German
Transfer acceptability: CSU; UC – GERM 102A and 102B combined: maximum credit, 5 units; UC – both courses must be taken for transfer credit to be given
 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)

3 hours lecture

Prerequisite: GERM 102A or two years of high school German

Transfer acceptability: CSU; UC – GERM 102A and 102B combined: maximum credit, 5 units; UC – both courses must be taken for transfer credit to be given

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)

5 hours lecture

Prerequisite: German 201 or four years of high school German

Transfer acceptability: CSU; UC; CAN GERM 10; GERM 8; 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
(5 courses minimum required, 15 units total)		
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
TOTAL UNITS		15

This program is also offered in Art and 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/RGC 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/RGC 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

The Digital Imaging program is also offered in 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
CINE/		
RTV 125 or	Beg Film/Video Field Production	3
GC/RGC 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	Avide Editing for Television & Film	3
TOTAL UNITS		15

The Digital Media program is also offered in 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/RGC 140	Digital Imaging/Photoshop I	3
GC 141	Digital Imaging/Photoshop II	3
GC/RGC 149	Page Layout and Design I	3
GC/RGC 152	Desktop Publishing with Illustrator	3
GC/RGC 203	Interactive Publishing with PDF's	3
TOTAL UNITS		15

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/RGC 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 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
GC 142	Digital Imaging/PhotoShop III	3
GC/RGC 152	Desktop Publishing with Illustrator	3
GC/RGC 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
ENTT/RTV 120	Basic Television Production	3
RTV 150	Performance and Acting for Broadcast and Film	3
RTV 170	Introduction to Video Editing	3
RTV 225	Intermediate Film and Video Field Production	3
DT 180	3D Studio Max-Intro to 3D Modeling/Animation	3
TOTAL UNITS		30

The Digital Video program is also offered in 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
TOTAL UNITS		17

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/RGC 140	Digital Imaging/Photoshop I	3
GC/RGC 149	Page Layout and Design I	3
TOTAL UNITS		9

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.

A.A. Degree Major or Certificate of Achievement

Program Requirements		Units
GC 100	Graphic Communications	3
GC 105	Layout for Offset Lithography	3
GC/RGC 140	Digital Imaging/Photoshop I	3
GC/RGC 149	Page Layout and Design I	3
GC/RGC 152	Desktop Publishing with Illustrator	3
GC 180	Digital Prepress and Press I	3
GC/RGC 260	Portfolio Development and Presentation	3
ARTD 100	Graphic Design I	3
ARTD 210	Typography Design	3

Electives (Select one course)

CE 100*	Cooperative Education	1,2,3,4
CSIS 105	Computer Concepts/Microcomputer	3
DT/RDT 125	AutoCAD Introduction to Computer Aided Drafting	3
ENG 100	English Composition	4
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/RGC 202	Web Page Layout I	3
GC/RGC 203	Interactive Publishing with PDF's	3
GC 205	Graphics Estimating and Pricing	3
GC/RGC 249	Page Layout and Design II	3
JOUR 105	Newspaper Production	3
PHOT 100	Elementary Photography	3,5
TOTAL UNITS		28-31

*Cooperative Education must be related to this major.

Graphic Communications Management

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

A.A. Degree Major or Certificate of Achievement

Program Requirements		Units
GC 105	Layout for Offset Lithography	3
GC/RGC 140	Digital Imaging/Photoshop I	3
GC/RGC 149	Page Layout and Design I	3
GC/RGC 152	Desktop Publishing with Illustrator	3
GC 180	Digital Prepress and Press I	3
GC 182	Digital Prepress and Press II	3
GC 205	Graphics Estimating and Pricing	3
CSIS 105	Computer Concepts/Microcomputer	3

Electives (Select two courses)

BMGT 115	Organizational Theory and Design	3
GC 100	Graphic Communications	3
GC 142	Digital Imaging/Photoshop III	3
GC 185	Advanced Offset Press	3
GC/RGC 249	Page Layout and Design II	3
BUS 105	Bookkeeping Fundamentals	3
BUS 115	Business Law	3
BUS 125	Business English	3
ENG 100	English Composition	4
BUS 140	Selling for Business	3
BUS 155	Marketing	3
BMGT 105	Small Business Management	3
CE 100*	Cooperative Education	1,2,3,4
TOTAL UNITS		28 - 32

* Cooperative Education must be related to this major.

Graphic Communications Production

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

A.A. Degree Major or Certificate of Achievement

Requirements	Units
GC 100 Graphic Communications	3
GC 105 Layout for Offset Lithography	3
GC/RGC 140 Digital Imaging/Photoshop I	3
GC/RGC 149 Page Layout and Design I	3
GC 180 Digital Prepress and Press I	3
GC 182 Digital Prepress and Press II	3
GC 185 Advanced Offset Press	3
GC 205 Graphics Estimating and Pricing	3

Electives (Select two courses)

ART 104 Design and Composition	3
ARTD 100 Graphic Design I	3
BUS 125 Business English	3
CE 100* Cooperative Education	1,2,3,4
CHEM 100 Fundamentals of Chemistry	4
CSIS 105 Computer Concepts/ Microcomputer	3
ENG 100 English Composition	4
GC 142 Digital Imaging/Photoshop III	3
JOUR 105 Newspaper Production	3
JOUR 205 Advanced Newspaper Production	3
PHOT 100 Elementary Photography	3.5
TOTAL UNITS	28 – 32

* 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/RGC 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/RDT 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	Units
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/RGC 200 Introduction to Multimedia	3
GC 201 Intermediate Multimedia	3
GC 204 Motion Graphics/Multimedia-A	3

Electives (Select two courses)

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/RGC 140 Digital Imaging/Photoshop I	3
GC/RGC 152 Desktop Publishing with Illustrator	3
GC/ART 197 Multimedia Project	3
GC/RGC 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

The Interactive Media Design program is also offered in Art and 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*

Required Courses	Units
GC 144 Web Graphics	3
GC 200 Introduction to Multimedia	3
GC/RGC 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/RGC 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
MUS180 Computer Music I	3
RTV230 Digital Audio with Pro Tools	3
TOTAL UNITS	30

***Interactive Web Multimedia and Audio A.A. Degree Major/Certificate of Achievement pending approval by Chancellor's Office at time of catalog publication.**

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 proveniences:

- **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.

A.A. Degree Major or Certificate of Achievement

Program Requirements		Units
BUS 157	E-Commerce	3
CSIS/ RCSIS 137	Web Site Development/HTML	2
GC/ RGC 202 or	Web Page Layout I	3
GC 230 and	Web Page Layout I – Part I	1.5
GC 231	Web Page Layout I – Part II	1.5
LT 154	Information for Life Long Learning	3
	Emphasis Requirements	14–18
TOTAL UNITS		25-29

Emphasis in Business Education

Emphasis Requirements		Units
BMGT 105	Small Business Management	3
BUS 140	Selling for Business	3
BUS 150	Advertising	3
BUS 155	Marketing	3
BUS 170	Word Processing for Business – Basic	1
BUS 171	Word Processing for Business - Advanced	1

Emphasis in Graphic Communication

Emphasis Requirements		Units
GC 144	Web Graphics	3
GC/RGC 203	Interactive Publishing with PDF's	3
GC 206	Web Multimedia	3
GC 212	Web Page Layout II	3
GC 215	Designing for Web Standards I	3
GC 217 or	Online Store Design I	3
GC 229	Interactive Streaming Media	3

The Internet program is also offered in Business Education.

Internet Publisher

Prepares students with specific skills necessary for entry-level employment in the field of multimedia design and production. Topics in multimedia authoring which includes production skills and authoring systems, multimedia design, content development and visual design of multimedia productions.

Certificate of Proficiency

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

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 142	Digital Imaging/PhotoShop III	3
GC 165	Digital Video Design	3
GC/RGC 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

Electives (2 course minimum required, 6 units total)

ARTD 220	Motion Design	3
ARTI 246	Digital 3-D Design and Modeling	3
ARTI 247	Digital 3D Design and Animation	3
GC 101	History of Graphic Communications	3
GC/RGC 140	Digital Imaging/PhotoShop I	3
GC 141	Digital Imaging/PhotoShop II	3
GC/RGC 152	Desktop Publishing with Illustrator	3
GC/RGC 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
TOTAL UNITS		30

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/RGC 170	Screen Printing	3
GC/RGC 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
GC/RGC 140	Digital Imaging/Photoshop I	3
GC/RGC 152	Desktop Publishing with Illustrator	3
GC/RGC 170	Screen Printing	3
GC/RGC 172	Textile Screen Printing	3
GC 174	Commercial Screen Printing	3

GC 180	Digital Prepress and Press I	3
GC 205	Graphics Estimating and Pricing	3
BMGT 105	Small Business Management	3

Electives (Select one course)

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

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/RGC 140 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 to 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	16-17

The Video Game Artist program is also offered in 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)

BUS 180	Access for Business	1
CSIS 173	Designing Microsoft SQL Server Database	2
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/RGC 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/RGC 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)

Three 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 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 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 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 RGC 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/RGC 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 RGC 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
 Hands-on instruction in creating electronic documents that can be viewed, searched, and printed from virtually any computer or printer.
- 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 205 Graphics Estimating and Pricing (3)**
3 hours lecture
Recommended preparation: GC 105
Transfer acceptability: CSU
 Business plans, cost centers, estimating, pricing, marketing and professional issues for Graphic Communication.
- GC 206 Web Multimedia (3)**
6 hours lecture/laboratory
Prerequisite: GC/RGC 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/RGC 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/RGC 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 249 Page Layout and Design II (3)

6 hours lecture/laboratory

Recommended preparation: GC/R GC 149

Note: Cross listed as RGC 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/RGC 140 and GC/RGC 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)

2 hours lecture-2 hours lecture/laboratory

Transfer acceptability: CSU; UC

Individual well-being will be developed through the study of the emotional, spiritual, intellectual, social, and physical qualities of health. Physical activities in lab setting will be used to support and reinforce the applicable areas.

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 present. 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 110 How Things Work (2)

4 hours lecture/laboratory

Note: May be taken 2 times

An introduction to the inner workings of the machines around us, such as computers, automobiles, household appliances, and audio equipment. Hands-on experiments with readily available materials

will explain how our technical world works and how to fix it when it doesn't.

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
TOTAL UNITS	16 - 19

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
TOTAL UNITS	4 - 6

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
TOTAL UNITS	7 - 9

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
TOTAL UNITS	18

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.

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

Coordinated by educators and professional interior

designers, this certificate of achievement and 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 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 140 Selling for Business	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
TOTAL UNITS	20 - 21

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

Interior Design

Coordinated by educators and professional interior designers, this certificate of achievement and 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 135 Fabrics for Designers	3
ID 150 Computer Aided Drafting for Designers (CADD)	3
ID 125 Presentation Methods in Interior Design I	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, 210; 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**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 Electronic Spreadsheet Laboratory	1
BUS 110	Business Mathematics	3
BUS 205	Business Writing	3
BUS 100	Introduction to Business	3
BUS 155	Marketing	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

Provides an awareness of the applicability and limitations of business finance theories and practices when applied to the financial management of international business. Also emphasizes the international dimension of banking and finance through the foreign exchange rates and markets. Introduces students to foreign currency loans, capital budgeting for foreign projects, and examines many of the significant policies and sources of international funds.

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)

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-paces study in the Foreign Language Laboratory.

ITAL 201A Italian IIIA (3)

3 hours lecture

Prerequisite: ITAL 110 or three years of high school Italian

Transfer acceptability: CSU; UC – ITAL 205 and 206 combined: maximum credit, 5 units; UC – both courses must be taken for transfer credit to be given

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)

3 hours lecture

Prerequisite: ITAL 201A

Transfer acceptability: CSU; UC – ITAL 205 and 206 combined: maximum credit, 5 units; UC – both courses must be taken for transfer credit to be given

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)

3 hours lecture

Transfer acceptability: CSU; UC – JAPN 101A and 101B combined: maximum credit, 5 units; UC – both courses must be taken for

transfer credit to be given

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)

3 hours lecture

Prerequisite: JAPN 101A

Transfer acceptability: CSU; UC – JAPN 101A and 101B combined: maximum credit, 5 units; UC – both courses must be taken for transfer credit to be given

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)

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)

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
GC/RGC 149	Page Layout and Design I	3
PSYC 100 or	Intro to Psychology	3
SOC 100	Intro to Sociology	3
POSC 101	Intro Politics/American Political Institutions	3
POSC 102	Intro to U. S. and California Governments	3
ENG 100	English Composition	4
COMM 100or	Mass Media in America	3
COMM 105	Human Values in the Mass Media	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

Program Requirements

	Units
LS/PLS 121 Introduction to Law	3
LS 145 Legal Ethics	3
LS/PLS 240 Civil Liberties and Procedures	3
LS/PLS 245 Civil Litigation I	3
LS/PLS 150 Legal Research	2
LS/PLS 155 Legal Writing	1
LS/PLS 290 Contemporary Legal Issues	2
PHIL 115 Logic and Critical Thinking	3
POSC 101 Intro Politics/Am Political Institutions	3
POSC 102 Intro U.S. /Calif Governments	3
POSC 110 Introduction to World Politics	3

Electives (Select 6 units)

AJ 100 Introduction to Criminal Justice	3
BUS 115 Business Law	3
LS/PLS 190 Clinical Studies	3
PLS 140 Contract Law	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
TOTAL UNITS	35

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 Lifelong Learning.

Legal Studies students should seek early advising for transfer.

COURSE OFFERINGS

LS 121 Introduction to Law (3)

3 hours lecture

Note: Cross listed as PLS 121

Transfer acceptability: 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.

LS 145 Legal Ethics (3)

3 hours lecture

Transfer acceptability: 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.

LS 150 Legal Research (2)

2 hours lecture

Recommended preparation: A minimum grade of "C" in ENG 100

Note: Cross listed as PLS 150

Transfer acceptability: 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/		
RCSIS 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 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

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

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 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 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, Module I	1
OIS 231.2 Medical Machine Transcription, Module 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
TOTAL UNITS	28.5 - 31.5

* May be exempt by typing proficiency exam.

COURSE OFFERINGS

Courses numbered under 100 are not intended for transfer credit.

MA 50 Introduction to Medical Assisting (3)

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.

MA 55 Medical Terminology and Anatomy (3)

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.

MA 56 Medical Terminology and Anatomy (3)

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.

MA 60 Medical Insurance (3)

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.

MA 61 Medical Insurance Coding (3)

2 hours lecture-3 hours laboratory

Prerequisite: 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.

MA 65 Clinical Assisting: Patient Care (5)

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

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 165 Introduction to the Asian Americans (3)

3 hours lecture

Transfer acceptability: CSU; UC

Introduction to the experience of Asian peoples in the United States. Examines the history of immigration, economics, cultural assimilation, and Asian-American communities in U.S. Government policies toward Asian immigrants and U.S. citizens are examined in terms of American cultural pluralism.

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.

In order to earn a certificate, students must achieve a minimum grade of "C" in 5 of the 6 certificate program courses.

Certificate of Proficiency

Program Requirements	Units
(Choose 5 of the courses listed, totaling 15 units)	
ART 243 Digital 3D Design and Modeling	3
ART 247 Computer Animation and Multimedia II	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
TOTAL UNITS	15

This program is also offered in Graphic Communications and Art.

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
TOTAL UNITS	17

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	
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
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Group One (Select 12 units)

MUS 220	Applied Music	3
MUS 222	Performance Studies	4
MUS 134-158, 177, 178, 184, 198	Performance Ensembles	4
MUS 180	Computer Music I	3
MUS 181	Computer Music II	3

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 20 th 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 50 are non-degree 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

12/8/04

Note: Cross listed as DNCE 137; may be taken 4 times

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

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/DNCE 138 pending Chancellor's Office approval at time of catalog publication

MUS 143 Palomar Chorale Chamber Ensemble (.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

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 Arthur 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 ART 243 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/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 of 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
Semester I		
NURS 117	Nursing I	9
NURS 103	Nursing Foundation I	2
Semester II		
NURS 118	Nursing II	9
Semester III		
NURS 217	Nursing III	9
NURS 203	Nursing Foundation II	2
Semester IV		
NURS 218	Nursing IV	9
Additional Related Support Courses		
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		
<i>American History and Institutions</i>		6
<i>Health and Physical Education requirement</i> (waived by completing nursing curriculum)		0
<i>Humanities</i>		3
<i>Integrated Self and Life-Long Learning</i> (met by completing nursing curriculum)		0
<i>Multicultural requirement</i> (met by completing NURS 103 & 217)		0
TOTAL UNITS		77 – 83

* 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

MATH 56, 60, or an appropriate score on an approved math exam	Units
MICR 200*	0-6
ZOO 200*	5
ZOO 203*	5
NURS 110	5
	2

Semester I

NURS 217	Nursing III	9
NURS 203	Nursing Foundation II	2

Semester II

NURS 218	Nursing IV	9
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Additional Related Support Courses

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 110 & 217)	0
TOTAL UNITS	59 – 65

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
Semester I		
NURS 217**	Nursing III	9
Semester II		
NURS 218	Nursing IV	9
TOTAL UNITS		30

* 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 110**Corequisite:** NURS 217**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, member of the discipline, and manager of care. 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

Oceanography (OCN)

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

COURSE OFFERINGS

OCN 100 Oceanography Lecture (3)

3 hours lecture

Note: Not open to students with prior credit in OCN 101

Transfer acceptability: CSU; UC – OCN 100/100L and 101 combined: maximum credit, 4 units

An introductory course designed to acquaint the student with general oceanography. Topics treated include the history and scope of oceanography, properties of sea water, ocean currents, ocean waves and tides, submarine morphology and geology, marine sediments, life in the sea, and the significance of the oceans to man.

OCN 100L Oceanography Laboratory (1)

3 hours laboratory

Prerequisite: Completion of, or concurrent enrollment in, OCN 100

Note: Not open to students with prior credit in OCN 101

Transfer acceptability: CSU; UC – OCN 100/100L and 101 combined: maximum credit, 4 units

Laboratory and field investigations of marine environments including geologic, physical, chemical, and biological aspects of the ocean and coastal area. The course emphasizes changing physical factors and man's activities as they affect the oceans.

OCN 101 Oceanography (4)

3 hours lecture-3 hours laboratory

Note: Not open to students with prior credit in OCN 100 or 100L

Transfer acceptability: CSU; UC – OCN 100/100L and 101 combined: maximum credit, 4 units

An introductory course in general oceanography including laboratory and field investigations of marine environments. Topics include: the history and scope of oceanography, properties of sea water, ocean currents, ocean waves and tides, submarine morphology and geology, life in the sea, and the significance of the oceans to man. Laboratory portion includes investigation of marine environments including geologic, chemical, physical, and biological aspects of the ocean and coastal area.

OCN 115 Coastal Oceanography (3)

3 hours lecture

Transfer acceptability: CSU; UC

This course is designed for those interested in learning more about the coastal zone and its relationship with human activities. Students will examine a variety of coastal zones including sandy coastlines, rocky coastlines, coastal wetlands, coral reefs, and glaciated coastlines. Analysis of the coastal types will include investigation of case studies from around the world with a focus on the West Coast U.S. and California. Case studies will include effects of natural coastal processes as well as effects produced by human intervention. Several field trips will be offered. Students are expected to participate in a one-day field trip.

OCN 197 Oceanography 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 Oceanography. See Class Schedule for specific topic covered. Course title will designate subject covered.

OCN 295 Directed Study in Oceanography (1,2,3)

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

Prerequisite: OCN 100 or 101

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.

Office Information Systems (OIS)

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.

PROGRAMS OF STUDY

Administrative Assistant

This program is designed to prepare the student for entry-level office work in business and industry.

A Certificate of Achievement and/or an AA degree will be awarded to students who successfully complete the requirements listed below.

A.A. Degree Major or Certificate of Achievement

Program Requirements	Units
BUS 105 Bookkeeping Fundamentals	3
BUS 110 Business Mathematics	3
BUS 125 Business English	3
OIS 102 Intermediate Keyboarding	3
OIS 103 Advanced Keyboarding	1
OIS 120 Intro to Office Information Systems	3
OIS 136.1 Word Basic Module I	1
OIS 136.2 Word Intermediate Module II	1
OIS 136.3 Word Advanced Module III	1
BUS 175 Excel for Business	1
BUS 180 Access for Business	1
BUS 185 PowerPoint for Business	1
BUS 190 Internet for Business	1
OIS 115 Filing and Records Management	1
OIS 205 Office Procedures	3
OIS 230 Secretarial Machine Transcription	1
CE 100 Cooperative Education	1,2,3,4
Demonstrate the ability to type 50 net words per minute for five minutes with 5 errors or less	0
TOTAL UNITS	29 - 32

Recommended Electives: BUS 186, 188, 205

Credit for Certified Professional Secretary (CPS)

Certification:

Individuals who hold a certificate as a Certified Professional Secretary (CPS) or Certified Administrative Professional (CAP) may apply to the Business Education Department for units toward an Administrative Assistant Associate of Arts Degree. The units granted, with a grade of "CR", will be posted to the student's transcript upon completion of the remaining Associate in Arts degree. Eligibility for the units will be determined by the Office Information Systems staff, extension 2498. Students must provide evidence of successful completion of the Certified Professional Secretary certification or the Certified Administrative Professional certification.

Data Entry Clerk

Provides a program to prepare the student for an entry-level data entry position.

A Certificate of Proficiency will be awarded to students who successfully complete the requirements listed below.

Certificate of Proficiency

Program Requirements		Units
OIS 101	Beginning Keyboarding	3
OIS 108	Data Entry Skills I	1
OIS 109	Data Entry Skills II	1
OIS 115	Filing and Records Management	1
OIS 136.1	Word Basic Module I	1
OIS 136.2	Word Intermediate Module II	1
	Demonstrate the ability to key from average copy at a minimum speed of 10,000 strokes per hour with an error rate not to exceed 0.5%	0
TOTAL UNITS		8

International Administrative Assistant

This program is designed to prepare the student for entry-level office work in a bilingual business environment.

A Certificate of Achievement and/or an A.A. degree will be awarded to students who successfully complete the requirements listed below.

A.A. Degree Major or Certificate of Achievement

Program Requirements		Units
IBUS 100	Intro to Int'l Business and Management	3
IBUS 105	International Marketing	3
IBUS 110	Cultural Environment/Int'l Business	3
BUS 125	Business English	3
OIS 102	Intermediate Keyboarding	3
OIS 120	Intro to Office Information Systems	3
OIS 136.1	Word Basic Module I	1
OIS 136.2	Word Intermediate Module II	1
BUS 175	Excel for Business	1
BUS 180	Access for Business	1
BUS 185	PowerPoint for Business	1
BUS 190	Internet for Business	1
OIS 115	Filing and Records Management	1
OIS 205	Office Procedures	3
CE 100	Cooperative Education	1,2,3,4
	Demonstrate the ability to type 50 net words per minute for five minutes with 5 errors or less	0
TOTAL UNITS		29 – 32

Recommended Electives: BUS 186, 188, 205

Legal Secretary

Provides a program to prepare the student for entry-level legal office work.

A Certificate of Achievement and/or an A.A. degree will be awarded to students who successfully complete the requirements listed below.

A.A. Degree Major or Certificate of Achievement

Program Requirements		Units
BUS 125	Business English	3
BUS 205	Business Writing	3
OIS 102	Intermediate Keyboarding	3
OIS 103	Advanced Keyboarding	1
OIS 120	Intro to Office Information Systems	3
OIS 115	Filing and Records Management	1
OIS 136.1	Word Basic Module I	1
OIS 136.2	Word Intermediate Module II	1
OIS 210	Law Office Procedures I	3
OIS 215	Law Office Procedures II	3
OIS 232.1	Legal Machine Transcription Basic Module I	1
OIS 232.2	Legal Machine Transcription Advance Module II	1
PLS 121	Introduction to Law	3
CE 100	Cooperative Education	1,2,3,4
	Demonstrate the ability to type 60 net words per minute for five minutes with 5 errors or less	0
TOTAL UNITS		28 – 31

Recommended Electives: BUS 105, 110, 115, 175, 180, 185; PLS 245, 246

Credit for California Certified Legal Secretary (CCLS)

Certification: Individuals who hold a certificate as a California Certified Legal Secretary (CCLS) may apply to the Business Education Department for units toward a Legal Secretary A.A. Degree. The units granted, with a grade of "CR," will be posted to the student's transcript upon completion of the remaining Associate of Art's degree. Eligibility for the units will be determined by the Office Information Systems staff, extension 2498. Students must provide evidence of successful completion of the California Certified Legal Secretary.

Medical Office Specialist

Provides specific skills for an entry-level position in a medical office or clinic.

A Certificate of Achievement and/or an A.A. degree will be awarded to students who successfully complete the requirement listed below.

A.A. Degree Major or Certificate of Achievement

Program Requirements		Units
MA 55	Medical Terminology and Anatomy	3
MA 56	Medical Terminology and Anatomy	3
MA 60	Medical Insurance	3
BUS 110	Business Mathematics	3
BUS 125	Business English	3
OIS 102	Intermediate Keyboarding	3
OIS 103	Advanced Keyboarding	1
OIS 115	Filing and Records Management	1
OIS 120	Intro to Office Information Systems	3
OIS 136.1	Word Basic Module I	1
OIS 136.2	Word Intermediate Module II	1
OIS 205	Office Procedures	3
OIS 231.1	Medical Machine Transcription, Module I	1
OIS 231.2	Medical Machine Transcription, Module II	1
CE 100	Cooperative Education	1,2,3,4
	Demonstrate the ability to type 45 net words per minute for five minutes with 5 errors or less	0
TOTAL UNITS		31 – 34

Recommended Electives: BUS 105, 175, 180, 185

Medical Transcriptionist

Provides specific skills for preparing permanent patient records by transcribing dictated medical reports.

A Certificate of Achievement and/or an A.A. degree will be awarded to students who successfully complete the requirements listed below.

A.A. Degree Major or Certificate of Achievement

Program Requirements		Units
MA 55	Medical Terminology and Anatomy	3
MA 56	Medical Terminology and Anatomy	3
BUS 125	Business English	3
OIS 102	Intermediate Keyboarding	3
OIS 103	Advanced Keyboarding	1
OIS 120	Intro to Office Information Systems	3
OIS 136.1	Word Basic Module I	1
OIS 136.2	Word Intermediate Module II	1
OIS 220	Medical Transcription Procedures	3
OIS 231.1	Medical Machine Transcription, Module I	1
OIS 231.2	Medical Machine Transcription, Module II	1
OIS 231.3	Medical Machine Transcription, Module III	1
OIS 231.4	Medical Machine Transcription, Module IV	1
OIS 231.5	Medical Machine Transcription, Module V	1
OIS 231.6	Medical Machine Transcription, Module VI	1
CE 100	Cooperative Education	1,2,3,4
	Demonstrate the ability to type at least 50 net words per minute for five minutes with 5 errors or less	0
TOTAL UNITS		28 – 31

Recommended Electives: BUS 175, 180, 185

Office Assistant

Provides a program to prepare the student for an entry-level office assistant position.

A Certificate of Achievement will be awarded to students who successfully complete the requirements listed below.

Certificate of Proficiency

Program Requirements		Units
OIS 102	Intermediate Keyboarding	3
BUS 125	Business English	3
OIS 115	Filing and Records Management	1
OIS 120	Intro to Office Information Systems	3
OIS 136.1	Word Basic Module I	1
OIS 136.2	Word Intermediate Module II	1
BUS 175	Excel for Business	1
BUS 190	Internet for Business	1
OIS 205	Office Procedures	3
	Demonstrate the ability to type at least 45 net words per minute for five minutes	0
TOTAL UNITS		17

Receptionist

This program is designed to prepare the student for an entry-level receptionist position.

A Certificate of Proficiency will be awarded to students who successfully complete the requirements listed below.

Certificate of Proficiency

Program Requirements		Units
BUS 175	Excel for Business	1
BUS 190	Internet for Business	1
OIS 102	Intermediate Keyboarding	3
OIS 115	Filing and Records Management	1
OIS 120	Intro to Office Information Systems	3
OIS 136.1	Word Basic Module I	1
OIS 136.2	Word Intermediate Module II	1
OIS 205	Office Procedures	3
	Demonstrate the ability to type at least 45 net words per minute for five minutes with 5 errors or less	0
TOTAL UNITS		14

Virtual Assistant

Prepares students to develop a business as a Virtual Assistant, defined as an independent entrepreneur providing administrative, creative, and/or technical services to clients in a virtual environment.

In order to earn this certificate, students must achieve a minimum grade of "C" in each of the certificate program courses. It is assumed that students possess strong written and oral communication skills, advanced keyboarding skills, and basic computer knowledge.

Certificate of Proficiency

Program Requirements		Units
BMGT 105	Small Business Management	3
BUS 138	Business Ethics	2
BUS 155	Marketing	3
BUS 175	Excel for Business	1
BUS 185	PowerPoint for Business	1
BUS 186	Publisher for Business	1
BUS 190	Internet for Business	1
OIS 125	Creating the Virtual Office	3
OIS 136.2	Word Intermediate Module II	1
OIS 136.3	Word Advanced Module III	1
TOTAL UNITS		17

Recommended Electives: BMGT 130; BUS 105, 115, 142, 150, 187; OIS 205

Courses numbered under 100 are not intended for transfer credit.

COURSE OFFERINGS**OIS 50 CAP Review I (3)**

3 hours lecture

Note: Offered in the fall semester only

Designed to help prepare students for the four-part Certified Administrative Professional (CAP) Exam with emphasis in the areas of economics, accounting, and office administration/communication. Students should either have several years of working office experience or have completed an administrative assistant certificate program.

OIS 51 CAP Review II (3)

3 hours lecture

Note: Offered in the spring semester only

Designed to help prepare students for the four-part Certified Administrative Professional (CAP) Exam with emphasis in the areas of office technology, business law, management, and organizational planning. Students should either have several years of working office experience or have completed an administrative assistant certificate program.

OIS 101 Beginning Keyboarding (3)

2 hours lecture-3 hours laboratory

Transfer acceptability: CSU

A beginning course in keyboarding on the computer. Class includes learning to keyboard alphabetic, numeric, and symbol keys by touch; developing speed and accuracy in straight copy writing; and keyboarding business documents such as letters, reports, memos, and simple tables.

OIS 102 Intermediate Keyboarding (3)

2 hours lecture-3 hours laboratory

Recommended preparation: A minimum grade of "C" in OIS 101 or a keyboarding speed of 30 net words per minute

Transfer acceptability: CSU

The development of speed and accuracy in keyboarding with emphasis on production of business letters and other business documents and forms.

OIS 103 Advanced Keyboarding (1)

Students arrange 32 hours lecture/laboratory with instructor for self-paced completion of course.

Recommended preparation: A minimum grade of "C" in OIS 102 or a keyboarding speed of 45 net words per minute

Note: Open entry/Open exit

Transfer acceptability: CSU

Technique building, special speed building, and control building practices designed to develop and improve straight-copy performance.

OIS 108 Data Entry Skills I (1)

Course requires 32 hours lecture/laboratory.

Recommended preparation: A minimum grade of "C" in OIS 101 or a keyboarding speed of 30 net words a minute

Note: Open entry/Open exit

Development of 10-key touch on the computer numeric keypad. Development and measurement of speed and accuracy in executing keyboard functions applied to a variety of data entry formats.

OIS 109 Data Entry Skills II (1)

32 hours lecture/laboratory

Recommended preparation: A minimum grade of "C" in OIS 108

Note: Open enter/Open exit

Continued speed and accuracy development of 10-key touch on the computer numeric keypad, measurement of speed and accuracy in executing keyboard functions, and development of logical thinking and decision-making skills applied to a variety of forms.

OIS 115 Filing and Records Management (1)

Students arrange 32 hours lecture/laboratory with instructor for self-paced completion of course.

Note: Open entry/Open exit

Transfer acceptability: CSU

Training in principles of filing and records management. Study and practice in filing by the alphabetic, numeric, geographic, and subject methods.

OIS 120 Introduction to Office Information Systems (3)*3 hours lecture***Note:** Offered in the fall semester, day only; spring semester, night only**Transfer acceptability:** CSU

How automation has changed and restructured the modern office and the specific role technology is playing in that change. Topics covered will include computer fundamentals, key software applications, electronic communications, creation of basic web pages, networking, distance learning, and careers. At the conclusion of this course, students will be prepared to take the IC³ certification.

OIS 125 Creating the Virtual Office (3)*3 hours lecture*

An overview course for Virtual Assistants who provide administrative, creative, and/or technical services to clients in a virtual environment. Topics will include naming, organizing, and managing your virtual business; financial planning; time management; evaluating, buying and using technology; domain registration; marketing and promoting the virtual business; how and where to find clients; and business ethics.

OIS 136 Word Modules I-IV (1,2,3,4)*Each module requires 32 hours lecture/laboratory.***Note:** Each module may be taken two times. May be offered self-paced, open entry/open exit.**OIS 136.1 Word Basic Module I (1)****Recommended preparation:** A minimum grade of "C" in OIS 102 and 120**Transfer acceptability:** CSU

Hands-on application with Microsoft Word. Students will create, save, close, open, edit, and print a variety of business documents utilizing the following software features: finding and replacing text; moving and copying text; spell, thesaurus, grammar, and auto text; character, paragraph, page, and document formatting; envelopes; tables; columns; headers/footers; smart tags; tables; basic desktop publishing; and borders and special characters. The Class Schedule will designate software version covered.

OIS 136.2 Word Intermediate Module II (1)**Recommended preparation:** A minimum grade of "C" in OIS 136.1**Transfer acceptability:** CSU

Refinement of the basic skills learned in OIS 136.1 and practice with the more sophisticated features of Word on multi-page documents including advanced document formatting, merge and labels; hyperlinks; styles and templates; outlines; footnotes and endnotes; comparing and merging documents; linking and embedding objects; charts; Microsoft Office integration; and basic web page design. In addition, more advanced printing and file management techniques will be explored. The Class Schedule will designate software version covered.

OIS 136.3 Word Advanced Module III (1)**Recommended preparation:** A minimum grade of "C" in OIS 136.2**Transfer acceptability:** CSU

Refinement of the skills learned in OIS 136.2 and practice with the advanced features of Word on a variety of multi-page business documents including advanced file management; macros; customizing Word; on-screen forms; master and sub documents; tracking changes; index and table of contents; and bookmarks and cross references. The Class Schedule will designate software version covered.

OIS 136.4 Word Special Projects Module IV (1)**Recommended preparation:** A minimum grade of "C" in OIS 136.3**Transfer acceptability:** CSU

Designed to aid the student in producing individual projects utilizing the Word for Windows software. Content will be decided between the student and the instructor under a signed contract.

OIS 146 Shorthand Skill Development Modules I-III (1,2,3)

Each module requires 32 hours lecture/laboratory. Hours are arranged with instructor for self-paced completion of each module. Open entry/open exit.

OIS 146.1 Module I (1)**Recommended preparation:** A minimum grade of "C" in OIS 102 and minimum dictation speed of 60 wpm for three minutes**Theory/Vocabulary:** Emphasis is placed on mastering shorthand theory and vocabulary in writing and transcribing shorthand notes with speed and accuracy.**OIS 146.2 Module II (1)****Recommended preparation:** A minimum grade of "C" in OIS 146.1 and minimum dictation speed of 70 wpm for three minutes**Speed:** Emphasis is placed on further mastering shorthand theory and vocabulary in specialized areas and in writing and transcribing shorthand notes with speed and accuracy.**OIS 146.3 Module III (1)****Recommended preparation:** A minimum grade of "C" in OIS 146.2 and minimum dictation speed of 80 wpm for three minutes**Transcription:** Emphasis is placed on formatting and typing mailable transcripts from office-style dictation and continued speed development to an employable skill level.**OIS 197 Office Information Systems 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 Office Information Systems. See Class Schedule for specific topic offered. Course title will designate subject covered.

OIS 205 Office Procedures (3)*2 hours lecture-3 hours laboratory***Recommended preparation:** A minimum grade of "C" in OIS 102**Note:** Offered in fall semester, night only; spring semester, day only**Transfer acceptability:** CSU

The role of support personnel in today's office, including topics in human relations, job attitudes, and public relations; basic administrative support skills and applied procedures; practical application of office technologies; applied records management; meeting, travel, and conference planning; management and supervision skills; company politics and ethics; and changing job roles. The last six weeks of the course simulates work in either a general or medical office, depending on the student's major field of study.

OIS 210 Law Office Procedures I (3)*3 hours lecture***Recommended preparation:** A minimum grade of "C" in OIS 102 and LS 121 or PLS 121**Note:** Offered in fall semester, night only**Transfer acceptability:** CSU

Specialized vocabulary and training for the legal secretary, legal assistant, or paralegal including legal terminology, basic legal office procedures, basic court structure and procedures, legal document preparation, fast-track rules, automated legal office procedures, and legal research.

OIS 215 Law Office Procedures II (3)*3 hours lecture***Recommended preparation:** A minimum grade of "C" in OIS 210**Note:** Offered in spring semester, night only**Transfer acceptability:** CSU

Specialized vocabulary, training, and office administration for the legal secretary, legal assistant, or paralegal including civil procedure and the latest fast-track rules; unlawful detainer; family law; probate; corporations; and real estate transactions.

OIS 220 Medical Transcription Procedures (3)*3 hours lecture*

Designed for the medical transcription major. Topics include career information, ethical and legal issues in medical transcription, applied English skills, and techniques for the preparation of a variety of medical reports.

OIS 230 Secretarial Machine Transcription (1)**Recommended preparation:** A minimum grade of "C" in OIS 102**Transfer acceptability:** CSU**NOTE:** Open entry/open exit

Techniques of transcribing dictation of business documents from transcription equipment. Designed for the Office Information Systems - Administrative Assistant major.

OIS 231 Medical Machine Transcription Modules I-VI (1,2,3,4,5,6)

Each module requires 32 hours lecture/laboratory. Hours are arranged with instructor for self-paced completion of each module. Open entry/open exit.

Module I (1)**Recommended preparation:** A minimum grade of "C" in OIS 102 and 220; MA 55 and 56**Transfer acceptability:** CSU

Basic techniques for transcribing medical dictation from transcription equipment. Medical terminology from the SUM tapes related to the introduction of medical transcription, reports, and dermatology will be included. Designed for the Office Information Systems - Medical Office Specialist or Medical Transcriptionist major.

Module II (1)**Recommended preparation:** A minimum grade of "C" in OIS 231 Module I**Transfer acceptability:** CSU

Continued development of techniques for transcribing medical dictation from transcription equipment. Medical terminology from the SUM tapes related to urology, gastroenterology, and orthopedics will be included. Designed for the Office Information Systems - Medical Office Specialist or Medical Transcriptionist major.

Module III (1)**Recommended preparation:** A minimum grade of "C" in OIS 231 Module II**Transfer acceptability:** CSU

Continued development of techniques for transcribing medical dictation from transcription equipment. Medical terminology from the SUM tapes related to cardiology, pulmonary, endocrinology, and obstetrics/gynecology will be included. Designed for the Office Information Systems - Medical Transcriptionist major.

Module IV (1)**Recommended preparation:** A minimum grade of "C" in OIS 231 Module III**Transfer acceptability:** CSU

Continued development of techniques for transcribing medical dictation from transcription equipment. Medical terminology from the SUM tapes related to otorhinolaryngology, ophthalmology, neurology, and pharmacology will be included. Designed for the Office Information Systems - Medical Transcriptionist major.

Module V (1)**Recommended preparation:** A minimum grade of "C" in OIS 231 Module IV**Transfer acceptability:** CSU

Advanced medical transcription applications from the American Association of Medical Transcriptionist tapes on radiology, general medicine, and general surgery. Designed for the Office Information Systems - Medical Transcriptionist major.

Module VI (1)**Recommended preparation:** A minimum grade of "C" in OIS 231 Module V**Transfer acceptability:** CSU

Advanced medical transcription applications from the American Association of Medical Transcriptionist tapes on radiology, general medicine, and general surgery. Designed for the Office Information Systems - Medical Transcriptionist major.

OIS 232 Legal Machine Transcription Modules I-II (1,2)

Each module requires 32 hours lecture/laboratory. Hours are arranged with instructor for self-paced completion of each module. Each module may be taken two times. Open entry/open exit.

OIS 232.1 Legal Machine Transcription Basic Module I (1)**Recommended preparation:** A minimum grade of "C" in OIS 102 and 210**Transfer acceptability:** CSU

Techniques of transcribing legal dictation from transcription equipment. Terminology includes the areas of the lawsuit, family law, and wills and probate. Designed for the Office Information Systems - Legal Secretary major.

OIS 232.2 Legal Machine Transcription Advanced Module II (1)**Recommended preparation:** A minimum grade of "C" in OIS 232.1**Transfer acceptability:** CSU

Advanced transcription techniques and skill development of multi-page documents and specialized legal reports. Terminology includes the areas of corporations, real estate, and criminal law. Designed for the Office Information Systems - Legal Secretary major.

Paralegal Studies (PLS)

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 Support Assistant

For students who are interested in working within the legal field. This certificate program prepares the student for entry-level legal work, or enhances the skills of those students already working in law offices, corporations, the courts, or government agencies.

A Certificate of Proficiency will be awarded to students who successfully complete the courses listed below.

Certificate of Proficiency

Program Requirements		Units
LS/PLS 121	Introduction to Law	3
LS 145	Legal Ethics	3
PLS 110	Computer for Paralegals-Beg	2
OIS 210	Law Office Procedures I	3
BUS 205	Business Writing	3
OIS 115	Filing and Records Management	1
Demonstrate the ability to type 35 words per minute		
TOTAL UNITS		15

Recommended Electives: BUS 110, 125; OIS 102, 215

COURSE OFFERINGS

Courses numbered under 100 are not intended for transfer credit.

PLS 50 CLA Exam Preparation (3)

3 hours lecture

Recommended preparation: Completion of Paralegal Studies Program or seven years experience as a paralegal**Note:** Credit/No Credit grading only

An intensive review of substantive and procedural areas of the law to prepare for the Certified Legal Assistant (CLA) examination offered by the National Association of Legal Assistants. Successful completion of this examination certifies competence in the paralegal field and has been adopted by California as the qualifying standard for paralegals seeking advanced certification in specialty areas of practice.

PLS 110 Computer Literacy for Paralegals-Beginning (2)*4 hours lecture/laboratory***Transfer acceptability:** CSU

This course is an introduction to computer technology and its application within the law firm with emphasis on word processing, database management, and spreadsheets.

PLS 120 Introduction to Paralegal Studies and Ethics (3)*3 hours lecture***Transfer acceptability:** CSU

An overview of the role of the paralegal/legal assistant. Introduction to legal terminology, ethics in the law office, management of legal data, and research methods.

PLS 121 Introduction to Law (3)*3 hours lecture***Note:** Cross listed as LS 121**Transfer acceptability:** 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.

PLS 130 Client Interviewing and Investigations (2)*2 hours lecture***Prerequisite:** A minimum grade of "C" in PLS 120**Recommended preparation:** A minimum grade of "C" in LS 121 or PLS 121**Transfer acceptability:** CSU

The process of interviewing clients and witnesses by a paralegal in preparing a legal matter for resolution or possible litigation. The investigative process includes both formal and informal investigations by the paralegal.

PLS 140 Contract Law (3)*3 hours lecture***Prerequisite:** LS/PLS 121**Transfer acceptability:** CSU

This course is intended to provide the student with an in-depth analysis of the law pertaining to contract formation, and the resolution of contract disputes. Students will become familiar with basic contract drafting and interpretation.

PLS 150 Legal Research (2)*2 hours lecture***Recommended preparation:** A minimum grade of "C" in ENG 100**Note:** Cross listed as LS 150**Transfer acceptability:** 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.

PLS 155 Legal Writing (1)*1 hour lecture***Prerequisite:** LS/PLS 150 and ENG 100**Note:** Cross listed as LS 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.

PLS 160 Computer Assisted Legal Research (1)*2 hours lecture/laboratory***Prerequisite:** LS/PLS 155**Recommended preparation:** PLS 110 or BUS 170 and 171**Note:** Credit/No Credit grading only**Transfer acceptability:** CSU

Computer assisted legal research addressing the role of the paralegal conducting legal research utilizing CD ROMs, database systems, Westlaw, Lexis, and the Internet.

PLS 170 Alternative Dispute Resolution (2)*2 hours lecture***Prerequisite:** LS/PLS 121

Alternative Dispute Resolution (ADR) utilizes various processes to

settle disputes without a court adjudication, i.e., an alternative to civil dispute resolution. This course will review minitrial, settlement conference, conciliation, and emphasize negotiation mediation, and arbitration. The role of the paralegal in ADR will be addressed and a review of the essential laws.

PLS 190 Clinical Studies (3)*9 hours laboratory***Prerequisite:** LS/PLS 121**Note:** Cross listed as LS 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.

PLS 197 Paralegal 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

Topics in Paralegal Studies. See Class Schedule for specific topic covered. Course title will designate subject covered.

PLS 210 Computer Literacy for Paralegals – Advanced (2)*4 hours lecture/laboratory***Transfer acceptability:** CSU

This course will prepare the student to perform at an intermediate to advanced level in all areas of computer applications related to the legal profession. The student will be using state of the art software and hardware, receiving hands-on instruction and practical applications in the use of the MSOffice Suite, docket control and legal billing software, PowerPoint presentations using an LCD projection system, online court reporting, record search and retrieval, document scanning, Internet searches, electronic mail, file formats, printing procedures, and file management in a networked environment. The course also includes creation of a portfolio of student work to display computer literacy skills.

PLS 240 Civil Liberties and Procedures (3)*3 hours lecture***Recommended preparation:** ENG 50 or eligibility for ENG 100**Note:** Cross listed as LS 240**Transfer acceptability:** CSU

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.

PLS 245 Civil Litigation I (3)*3 hours lecture***Prerequisite:** LS/PLS 121**Note:** Cross listed as LS 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.

PLS 246 Civil Litigation II (2)*2 hours lecture***Prerequisite:** LS/PLS 245**Transfer acceptability:** CSU

Continuation of Civil Litigation I with an increased emphasis on research and development of in-depth knowledge of selected topics within the field of civil litigation.

PLS 248 Business Organizations (2)*2 hours lecture***Prerequisite:** LS/PLS 121**Recommended preparation:** PLS 160**Note:** Graded only**Transfer acceptability:** CSU

The role of the paralegal in corporate law will be emphasized with all business organizations reviewed; i.e., sole proprietorship, partnerships, and corporations. The primary focus will be on corporate formation and compliance.

PLS 251 Probate Law and Procedure (2)*2 hours lecture***Prerequisite:** LS/PLS 121**Transfer acceptability:** CSU

An overview of the procedural structure of basic probate court policies and practice. All necessary forms and pleadings will be examined and prepared.

PLS 255 Family Law and Procedure (2)*Two hours lecture (2)***Prerequisite:** LS/PLS 121**Transfer acceptability:** CSU

A concentration on domestic relations concerned with such subjects as paternity, custody, support, child care, and separation, with special emphasis given to the dissolution of marriage. The student will prepare the proper forms for dissolution and related matters. Concepts of separate and community property and division of property upon dissolution are also covered. Various other aspects of family law are discussed.

PLS 258 Bankruptcy Law and Procedure (2)*2 hours lecture***Prerequisite:** LS/PLS 121**Transfer acceptability:** CSU

Introduction to bankruptcy emphasizing both debtor relief and debt collection under the United States Bankruptcy Code. The bankruptcy system is analyzed from an historical as well as a contemporary posture reflecting current practices, philosophies, and bankruptcy alternatives.

PLS 259 Real Property Law and Procedure (2)*2 hours lecture***Prerequisite:** LS/PLS 121**Transfer acceptability:** CSU

California real property law: titles, community property, liens, sales contracts, escrow, separate property and property transfers. How ownership is acquired, transferred, and the legal rights and duties of the parties. Preparation of the proper forms and documents incident to real estate ownership and leasehold interest.

PLS 261 Torts and Personal Injury (3)*3 hours lecture***Prerequisite:** LS/PLS 121**Recommended preparation:** PLS 160**Transfer acceptability:** CSU

An overview of substantive tort law with an emphasis on procedure. An examination of negligence and an overview of insurance law, to include forms, and the preparation of an actual case for arbitration and trial.

PLS 263 Administrative Law and Procedure (2)*2 hours lecture***Prerequisite:** LS/PLS 121**Recommended preparation:** PLS 160**Transfer acceptability:** CSU

The study of Administrative Law to include the legislative process, various agencies, and rule making and adjudication. The focus of this course is on administrative procedure, i.e., the-doing-of administrative law.

PLS 265 Criminal Law and Procedure (2)*2 hours lecture***Prerequisite:** LS/PLS 121**Recommended preparation:** ENG 100 and LS/PLS 150**Transfer acceptability:** CSU

An overview of substantive criminal law and the criminal justice process with an emphasis on criminal procedures through which criminal law is enforced.

PLS 270 Intellectual Property (2)*2 hours lecture***Prerequisite:** LS/PLS 121**Transfer acceptability:** CSU

Intellectual Property provides an overview of the law for paralegals who may wish to specialize in this area of practice. This course will focus on the role of the paralegal, as part of the legal team, in protecting patents, trademarks, and copyrights in the global marketplace.

PLS 271 Elder Law and Procedure (2)*2 hours lecture***Prerequisite:** LS/PLS 121**Recommended preparation:** LS/PLS 150 and LS/PLS 155

Elder Law focuses on a comprehensive review of the law relative to elders, as one the fastest growing areas in the field. The course will cover many different areas of the law having an impact on the elderly, including various important documents used in practice.

PLS 273 Immigration Law and Procedure (2)*2 hours lecture***Prerequisite:** LS/PLS 121**Recommended preparation:** PLS 160**Note:** Graded only**Transfer acceptability:** CSU

This course will provide an overview of the basic principles of immigration law and procedure. Federal law and cases will be reviewed, along with legal principles of immigration law.

PLS 275 Employment Law and Practice (2)*2 hours lecture***Prerequisite:** LS/PLS 121**Recommended preparation:** LS/PLS 150 and LS/PLS 155

Employment law for paralegals. An introduction to the regulatory environment, common law principles, and an overview of labor relation law. The course will review ADA, sexual harassment, discrimination, and employees' rights.

PLS 290 Contemporary Legal Issues (2)*2 hours lecture***Prerequisite:** LS/PLS 150**Note:** Cross listed as LS 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.

PLS 295 Directed Study in Paralegal Studies(1,2,3)*3, 6, or 9 hours laboratory***Prerequisite:** Approval of project or research by department chairperson**Note:** May be taken 2 times**Transfer acceptability:** CSU

Independent study for students who have demonstrated skills and/or proficiencies in Paralegal 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.

Parks and Recreation Management (PKS)

Contact Occupational & Noncredit Programs for further information, (760) 744-1150, ext. 2284. 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

Parks and Recreation Management

Provides the skills necessary for work in local, state, and national parks and private recreational facilities.

A.A. Degree Major or Certificate of Achievement

Program Requirements		Units
PKS 100	Resources and Outdoor Recreation	3
PKS 101	Parks Maintenance	3

PKS 102	Plant and Pest Identification	3
PKS 103	Parks: Function/Mgmt/Liability	3
PKS 120	Principles of Plant Growth	3

Electives - Group I

(Electives for the municipal park, landscape supervision, and golf course maintenance career track. Select three courses.)

BOT 110	Botany of Spring Wildflowers	4
CSIS 120/		
RCSIS 120	Microcomputer Applications	3
DT/RDT 125	AutoCAD Intro Computer Aided Drafting	3
PKS 110	Elementary Recreational Resource Design	3
PKS 197	Parks Topics	3
CE 100	Cooperative Education	3,4

Electives - Group II

(Electives for the park ranger, park guide, and park services career track. Select three courses.)

AIS/ANTH 140	The Original Californians	3
AJ 100	Introduction to Criminal Justice	3
AJ 103	Community Relations	3
BOT 110	Botany of Spring Wildflowers	4
CSIS/		
RCSIS 120	Microcomputer Applications	3
GEOL 110	General Geology: National Parks and Monuments	3
PKS 110	Elementary Recreational Resource Design	3
PKS 197	Parks Topics	3
CE 100	Cooperative Education	3,4

TOTAL UNITS**24 - 27**

recreational facilities. The relationship between improved design in park and recreational facilities, efficient maintenance, and reduced labor costs.

PKS 120 Principles of Plant Growth**(3)**

3 hours lecture

*Note: Not recommended for Biology majors***Transfer acceptability:** CSU

Plant growth and functions; the basic principles of soil and fertilizer science; the growth of plants in relation to the environmental factors of temperature, water, and light; the cycles of vegetative and reproductive growth.

PKS 197 Parks Topics**(.5-4)**

Units awarded in topics courses are dependent upon the number of ours 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 Parks and Recreation Management. See Class Schedule for specific topic offered. Course title will designate subject covered.

Philosophy (PHIL)

Contact the Behavioral Sciences Department for further information, (760) 744-1150, ext. 2330

COURSE OFFERINGS**PKS 100 Resources and Outdoor Recreation****(3)**

3 hours lecture

Transfer acceptability: CSU

A course designed to demonstrate to the public the urgent needs and current trends in the management of our natural resources for outdoor recreation. Topics to be covered are history and philosophy of the public park concept, trends and professional opportunities in outdoor recreation, and law enforcement problems.

PKS 101 Parks Maintenance**(3)**

2½ hours lecture and 1½ hours laboratory

Provides current knowledge of the various types of maintenance procedures in public and private parks. Introduces the characteristics and management requirements of various turf grasses with the exposure to the installation and maintenance of them; provides current knowledge of irrigation sprinkler systems in relation to landscape management.

PKS 102 Plant and Pest Identification**(3)**

3 hours lecture

Transfer acceptability: CSU

Provides students with the appropriate knowledge to evaluate the characteristics of plants and pests and to correctly identify them by both scientific nomenclature and common names used in the parks and landscape industry. Students will be able to use reference material to aid them in caring for plants and controlling pest problems.

PKS 103 Parks: Function, Management and Liability**(3)**

3 hours lecture

Transfer acceptability: CSU

Provides students with the background on reasons for parks, their history, and their development. The course includes discussion of modern day conditions and investigates the role of parks and open spaces in preserving natural and cultural resources, biological corridors, and providing opportunities for high-quality recreation. The course will investigate good park design and maintenance, effective operational principles, and public relations. Additionally, the course will provide an overview of the principles and practices of managing risk in public and private parks and recreational facilities.

PKS 110 Elementary Recreational Resource Design**(3)**

3 hours lecture

Transfer acceptability: CSU

The techniques of reading maps and blueprints for park and

COURSE OFFERINGS**PHIL 100 Philosophical Theories - Ethical and Political Values****(3)**

3 hours lecture

Transfer acceptability: CSU; UC; CAN PHIL 4

An introduction to philosophical thinking through the study of ethical and political values using a combination problem and historical approach. Relations between philosophical problems and those of science, society, and ordinary life are stressed. Both classical and modern reading sources are used.

PHIL 101 Philosophical Theories - Knowledge and Reality**(3)**

3 hours lecture

Transfer acceptability: CSU; UC; CAN PHIL 2

An introductory course to philosophical problems emphasizing methodology and the fundamental problems of knowledge and reality. Detailed consideration is to be given to the empirical method and to rationalism. Readings are taken from both classical and contemporary sources.

PHIL 102 Analytical Reasoning**(3)**

3 hours lecture

Recommended preparation: Eligibility for ENG 100**Transfer acceptability:** CSU; UC

Introduction to the relationship of language to logic, with applications of analysis, criticism, inductive and deductive reasoning and kinds of evidence to philosophical problems.

PHIL 105 Philosophy of Religion**(3)**

3 hours lecture

Transfer acceptability: CSU; UC

A critical consideration of selected perennial and modern problems: definition and role of religion and religious experience, mysticism, grounds for religious beliefs, and religious ethics. Students will be urged to evaluate critically their views of religion and their own religious beliefs. Both Eastern and Western religions will be considered.

PHIL 110 Asian Philosophies**(3)**

3 hours lecture

Transfer acceptability: CSU; UC

A critical examination of the philosophies which originated in Asia, including consideration of the practices which are associated with these belief systems. Several theories of meditation will be discussed. Some comparisons will be made to western attitudes and beliefs.

PHIL 115 Logic and Critical Thinking (3)
3 hours lecture
Prerequisite: A minimum grade of "C" in ENG 100
Transfer acceptability: CSU; UC
 Development of skills for critical thinking including open-mindedness, functions and wayward uses of language, informal fallacies, hypotheses and inductive reasoning, and elementary deductive inference forms. Basic communication skills, especially written, are developed and a critical perspective on world-views is emphasized.

PHIL 120 Logic (3)
3 hours lecture
Transfer acceptability: CSU; UC; CAN PHIL 6
 An analysis of arguments and the cognitive functions of language through the use of modern symbolic techniques.

PHIL 130 Contemporary Philosophical Movements (3)
3 hours lecture
Note: May be taken 2 times
Transfer acceptability: CSU; UC
 A critical examination of philosophical movements that has influenced 20th Century views of the individual, society and reality, such as Existentialism, Marxism, Pragmatism and Transcendentalism. The movement of thought will be approached as an attempt to deal reflectively with certain problems of living in the modern world. The philosophy studied will vary from semester to semester.

PHIL 135 Pre-Renaissance Western Philosophy (3)
3 hours lecture
Transfer acceptability: CSU; UC
 Major Western philosophical views from the early Greeks through the 14th Century. Original philosophical works of the periods will be studied and evaluated through critical thinking and writing.

PHIL 136 Renaissance and Modern Western Philosophy (3)
3 hours lecture
Transfer acceptability: CSU; UC
 Major Western philosophical views from the Renaissance to the present. Original philosophical works of the periods will be studied and evaluated through critical thinking and writing.

PHIL 191 Verbal Reasoning I (3)
3 hours lecture
Note: May be taken 4 times
 Preparation for the Verbal Reasoning section of the Medical College Admission Tests.

PHIL 192 Verbal Reasoning II (3)
3 hours lecture
Note: May be taken 4 times
 Preparation for the Verbal Reasoning section of the Medical College Admission Tests through application of verbal reasoning concepts by learning partners.

PHIL 197 Philosophy Topics (.5-6)
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 Philosophy. See Class Schedule for specific topic covered. Course title will designate subject covered.

PHIL 255 Literature and Ideas (3)
3 hours lecture
Prerequisite: Eligibility for ENG 100
Note: Cross listed as ENG 255; may be taken 2 times
Transfer acceptability: CSU; UC
 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.

PHIL 295 Directed Study in Philosophy (1,2,3)
1, 2, or 3 hours lecture
Prerequisite: Enrollment subject to project approval
Note: May be taken 4 times
Transfer acceptability: CSU; UC – Credit determined by UC upon review of course syllabus.
 An individualized or group project in philosophy of any nature approved by, and under the personal supervision of, the instructor.

Photography (PHOT)

See also Journalism

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

Commercial Photography

This Certificate is designed to provide an avenue for those students interested in pursuing a career as a professional photographer in the areas of advertising photography, product photography, portrait and wedding photography, photojournalism, editorial and documentary photography and other photo related vocations. Courses address technique, aesthetics, ethics and business practices. See course description for specific topics and prerequisites.

Certificate of Proficiency

Program Requirements	Units
PHOT/	
JOUR 140* Photojournalism	3.5
PHOT 209* Photographic Portfolio	2
PHOT 200* Commercial Photography	3.5
PHOT 225* Photographic Portraiture	3
PHOT 230* Digital Darkroom	3.5
TOTAL UNITS	15.5

*This course has a prerequisite.

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/RGC 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

The Digital Imaging program is also offered in Graphic Communications.

Fine Art Photography

This certificate is designed to provide an avenue for those students interested in pursuing a career as a fine art photographer. The course work will address a range of technical issues, personal expression, aesthetics, criticism, portfolio development, business practices, and history. See course description for specific topics and prerequisites.

Certificate of Proficiency

Program Requirements	Units
PHOT 125 History and Criticism of Photography	3
PHOT 201 Elementary Color Negative Printing	3
PHOT 210 Advanced Black and White Photography	3
PHOT 215 Creative Photography	3
PHOT 209 Photographic Portfolio	2
PHOT 216 Alternative Photographic Processes	3
TOTAL UNITS	17

Photography

A.A. Degree Major or Certificate of Achievement

Program Requirements	Units
PHOT 100 Elementary Photography	3.5
PHOT 105 Intermediate Black/White Photography	3.5
PHOT 125 History/Criticism of Photography	3
PHOT/	
JOUR 140 Photojournalism	3.5
PHOT 201 Elementary Color Negative Printing	3
PHOT 210 Advanced Black and White Photography	3
PHOT 220 Commercial Photography	3.5
PHOT 225 Photographic Portraiture	3
PHOT 230 Digital Darkroom	3.5
GC/RGC 140 Digital Imaging/Photoshop I	3

Electives (Select a minimum of 6 units)

PHOT 50 Digital Camera	2
PHOT 110 Basic 35mm Color Photography	3
PHOT 115 Creative 35mm Color Photography	3
PHOT 150 Digital Photography I	3.5
PHOT 170 Photo and Photographers of California	3
PHOT 197A or Photography Topics: Field Studies	
PHOT 197B or Photo Topics: Technical Studies	
PHOT 197C Photography Topics: General	1,2,3
PHOT 202 Intermediate Color Printing	3
PHOT 203 Color Printing Workshop	2
PHOT 209 Photographic Portfolio	2
PHOT 212 Landscape Photography	2
PHOT 215 Creative Photography	3
PHOT 216 Alternative Photo Processes	3
PHOT 296 Special Projects	1,2,3
TOTAL UNITS	38.5

COURSE OFFERINGS

PHOT 50 Digital Camera (3)

3 hours lecture

Principles and use of digital cameras for beginners. Understand how your digital camera works and what the menu selections mean. Learn to download image files to your computer, make basic editing changes and how to share your images via web, email and slide presentations. The aesthetics and technology of digital photography will be discussed in lecture and critique sessions of student assignments.

PHOT 100 Elementary Photography (3.5)

7 hours lecture/laboratory

Transfer acceptability: CSU; UC; CAN ART 18

Introduction to the mechanics, optics, chemistry, lighting principles, and practices of elementary photography. Explores the history, aesthetics, and the conceptualization of photographic imagery. Includes darkroom procedures in developing, printing, and finishing black and white photographic materials.

PHOT 105 Intermediate Black and White Photography (3.5)

7 hours lecture/laboratory

Prerequisite: PHOT 100

Transfer acceptability: CSU; UC

This course continues the study of the art and techniques associated with black and white photography. Problems relating to small and medium format camera systems and optics will be identified and compared. Further refinement in darkroom procedures and aesthetics will be explored.

PHOT 110 Basic 35mm Color Photography (3)

3 hours lecture

Transfer acceptability: CSU

An introduction to 35mm color slide photography including materials, techniques, and composition. Field trips, critiques, and discussions will be held on assigned topics. No darkroom laboratory.

PHOT 115 Creative 35mm Color Photography (3)

3 hours lecture

Prerequisite: PHOT 100, 105, or 110

Transfer acceptability: CSU

Use of the 35mm camera and color films applied to creative solutions to problems relating to color, texture, line, form, and composition. Critique and discussion on assigned subjects. No darkroom laboratory.

PHOT 125 History and Criticism of Photography (3)

3 hours lecture

Transfer acceptability: CSU; UC – PHOT 125 and 170 combined: maximum credit, one course

A survey of the history of photography from its invention to modern times and its development as an art and communication medium. Examines important photographers, their lives and works, in order to establish a critical understanding of photography and its place in our culture.

PHOT 140 Photojournalism (3.5)

7 hours lecture/laboratory

Prerequisite: PHOT 100 or 110

Note: Cross listed as JOUR 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.

PHOT 150 Digital Photography I (3.5)

7 hours lecture/lab

Lecture and laboratory activities will permit each student to discover the applications of electronic imaging for still photographers. Emphasis is placed on digital camera capture, image editing and quality digital output. The aesthetics and technology of digital photography will be discussed in lecture and critique sessions.

PHOT 170 The Photography and Photographers of California (3)

6 hours lecture/laboratory

Prerequisite: PHOT 100

Note: May be taken 2 times

Transfer acceptability: CSU; UC – PHOT 125 and 170 combined: maximum credit, one course

A survey and comparison of past and present California photographers and their work. An analysis of their philosophies and practices as it applies to the execution of photography as both an art and communication medium. There are numerous visitations with established photographers and galleries. Usually will require one trip of several days outside of the local area.

PHOT 197A Photography Topics: Field Studies (.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 Photography, Field Studies. See Class Schedule for specific topic offered. Course title will designate subject covered.

PHOT 197B Photography Topics: Technical Studies (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 Photography, Technical Studies. See Class Schedule for specific topic offered. Course title will designate subject covered.

PHOT 197C Photography Topics: General (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 Photography, General. See Class Schedule for specific topic offered. Course title will designate subject covered.

PHOT 201 Elementary Color Negative Printing (3)

7 hours lecture/laboratory

Prerequisite: PHOT 105

Transfer acceptability: CSU

An introduction to the techniques and aesthetics of color negative printing. History, materials, processes, and vision will be explored.

PHOT 202 Intermediate Color Printing (3)

7 hours lecture/laboratory

Prerequisite: PHOT 201

Transfer acceptability: CSU

A continuation of PHOT 201 with an emphasis on refined color printing skills. Color theory, image content, and printing excellence as well as contemporary issues will be stressed. Color positive printing will be introduced.

PHOT 203 Color Printing Workshop (2)

4 hours lecture/laboratory

Prerequisite: PHOT 201

Note: May be taken 3 times

Transfer acceptability: CSU

A continuing investigation of the creative uses of color negative and positive processes using portfolio and book projects to refine color skills. Emphasis on concepts and techniques in color. Students will be required to employ their developing visual literacy, analytical skills and subjective thought.

PHOT 209 Photographic Portfolio (2)

4 hours lecture/laboratory

Prerequisite: PHOT 105

Note: May be taken 3 times

Transfer acceptability: CSU

Methods of portfolio design and production, goal setting, market research, resumes, artist statements, cover and inquiry letters and self-promotion for a range of career, scholastic and artistic purposes. Students will be required to employ their developing visual literacy, analytical skills and subjective thought. Field trips and classroom visits by working professionals will be incorporated.

PHOT 210 Advanced Black and White Photography (3)

6 hours lecture/laboratory

Prerequisite: PHOT 105

Transfer acceptability: CSU; UC

An exploration of the creative and technical possibilities through various assignments aimed at developing a personal style and approach to the production of quality black and white photography. A study of the relationship between film exposure and development and its application in the "zone system" is stressed.

PHOT 212 Landscape Photography (2)

5 hours lecture/laboratory

Prerequisite: PHOT 100

Note: May be taken 4 times

Transfer acceptability: CSU

A survey and comparison of past and present landscape photography. An analysis of different philosophies and approaches as it applies to different locations. Usually will require one trip of several days outside of the local area.

PHOT 215 Creative Photography (3)

7 hours lecture/laboratory

Prerequisite: PHOT 100

Transfer acceptability: CSU; UC

Exploration of photography as an art form using both conventional and non-conventional silver and non-silver processes to permit broad variations and approaches to photographic expression.

PHOT 216 Alternative Photographic Processes (3)

7 hours lecture/laboratory

Prerequisite: PHOT 105

Transfer acceptability: CSU

A practical, hands-on survey of historical alternatives and contemporary variations to the modern standard photographic process. Silver, Ferric, Dichromate, and Photomechanical possibilities for self expression will be explored. Typical processes learned will include Van Dyke, Cyanotype, Platinum and Palladium Kallotype, Bromoil, and gum printing.

PHOT 220 Commercial Photography (3.5)

7 hours lecture/laboratory

Prerequisite: PHOT 105

Transfer acceptability: CSU

Considerations of professional technical fundamentals in lighting, film, camera systems, and management as applied in studio and location photography for commercial, advertising, and promotional purposes.

PHOT 225 Photographic Portraiture (3)

6 hours lecture/laboratory

Prerequisite: PHOT 105

Transfer acceptability: CSU

Techniques and styles of photographic portraiture. Studio and non-studio applications will be explored using black and white and color films. Emphasis on lighting equipment and techniques.

PHOT 230 Digital Darkroom (3.5)

7 hours lecture/laboratory

Prerequisite: GC 140 and PHOT 100

Note: May be taken 2 times

Transfer acceptability: CSU

Introduction to the technology of digital (electronic) photography using traditional and digital cameras, the computer, and industry standard imaging software as the primary photographic processing and manipulation tools. Continuing instruction in digital image processing directed toward photographic output. Exploration of capabilities and use of the digital darkroom.

PHOT 296 Special Projects (1,2,3)

3, 6, or 9 hours laboratory

Prerequisite: PHOT 105

Note: May be taken 3 times

Transfer acceptability: CSU

Requires demonstrated proficiency in photography and the creative ability and initiative to work independently on a particular sustained project which does not fit in the context of regularly scheduled classes. Could include portfolio preparation.

Physical Education (PE)

See also Athletics and Competitive Sports

Contact the Physical Education Department for further information, (760) 744-1150, ext. 2462. 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**Adult Fitness/Health Management**

Training for fitness instructors and lifestyle educators in designing, implementing and managing a variety of health/fitness programs.

Certificate of Achievement**Program Requirements**

	Units
ZOO 205 Physiology Lecture	3
FCS 165/	
HE 165 Fundamentals of Nutrition	3
HE 100 Health Education and Fitness Dynamics	3
PE 104/	
EME 100 Advanced First Aid	3
PSYC 100/	
SOC 100 Introduction to Psychology	3
CSIS105 Computer Concepts/Microcomputer	3
CE 100 Cooperative Education	2,3,4
BMGT 105 Small Business Management	3

Group I (Select a minimum of 3 units)

BUS 140 Salesmanship	3
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Group II (Select a minimum of 3 units)

ENG 100 English Composition	4
MATH 120 Elementary Statistics	3
SPCH 100 Oral Communication	3

Group III (Select a minimum of 3 units)

FCS 170 Nutrition: Eating Disorders and Obesity	3
PSYC 210 Physiological Psychology	4
PSYC 115 Psychology of Personal Growth	3
SOC 125/	
PSYC 125 Human Sexuality	3

Group IV (Select a minimum of 3 units)

PE 165 Coed Softball	1,1.5
PE 125 Physical Fitness	1,1.5
PE 128 Wellness Activities	1,1.5
PE 129 Aerobics/Step	1,1.5
PE 151 Intermediate Weight Training	1,1.5
PE 168 Soccer	1,1.5
PE 161 Intermediate Racquetball	1,1.5
PE 231 Water Safety Instruction	3
PE 232 Teaching Swimming	1,1.5
PE 100 Introduction to Physical Education	2

TOTAL UNITS 35 - 37

Physical Education

Provides the student with background to begin upper division coursework and serves as preparation for entry level jobs in health clubs, non-credentialed physical education and coaching positions, and as recreation aides. Transfer students should consult the four-year college or university catalog for specific requirements or see a Palomar College counselor.

A.A. Degree Major**Program Requirements**

	Units
ZOO 205 Physiology Lecture	3
ZOO 200 Anatomy	5
HE/FCS165 Fundamentals of Nutrition	3
HE 100 Health Education and Fitness Dynamics	3
PSYC 100 Introduction to Psychology	3
PE 129 Aerobics/Step	1,1.5
PE 231 Water Safety Instruction	3
PE 100 Introduction to Physical Education	2
PE 104/	
EME 100 Advanced First Aid	3

Plus 3 of the following team skill courses (An ACS course in these sports may be substituted for one)

PE 165 Coed Softball	1,1.5
PE 166 Basketball	1
PE 137 Water Polo	1
PE 156 Intermediate Volleyball	1,1.5

PE 168 Soccer	1,1.5
PE 210 Professional Preparation for Football	1,1.5,2
PE 212 Professional Preparation for Baseball	1,1.5,2

Plus 3 of the following individual skill courses (An ACS course in these sports may be substituted for one)

PE 118 Intermediate Golf	1,1.5
PE 127 Aquatic Exercises	1,1.5,2
PE 136 Intermediate Swimming	1,1.5
PE 141 Intermediate Tennis	1,1.5
PE 150 Beginning Weight Training	1,1.5
PE 161 Intermediate Racquetball	1,1.5

TOTAL UNITS 32 - 37

COURSE OFFERINGS

Courses numbered under 50 are non-degree courses.

Courses numbered under 100 are not intended for transfer credit.

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 tennis courses for credit.)

UC – All ACS and PE activity courses combined: maximum credit, 4 units

CSU – No limit on PE activity credit

PE 47 Physical Education 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 Physical Education. See class schedule for specific topic covered. Course title will designate subject covered.

PE 83 Cheerleading (3)

6 hours lecture/laboratory

Prerequisite: Enrollment subject to audition

Recommended preparation: Previous cheerleading experience

Note: This is a TBA class and will require travel away from the college on weekends and other dates; may be taken 4 times

Designed to teach the fundamentals of cheerleading. Students will explore practical and theoretical aspects of competitive and non-competitive cheerleading. Students will acquire knowledge of, and respect for, the skills needed to perform at college events and competition.

PE 100 Introduction to Physical Education (2)

2 hours lecture

Transfer acceptability: CSU; UC

An interpretation of the field designed to give the prospective major student an understanding of its scope. History and principles of physical education. Study of the objectives of modern physical education with a view toward the development of a basic philosophy and background for professional education.

PE 102 Physical Education in Elementary Schools (3)

3 hours lecture

Transfer acceptability: CSU

Develop understanding, knowledge, and appreciation of physical education activities adapted to the needs and interests of elementary school children. Experience in planning and conducting physical education programs.

PE 104 Advanced First Aid (3)

3 hours lecture

Note: Cross listed a EME 100

Transfer acceptability: CSU; UC

The study and application of emergency medical skills and procedures, including basic anatomy and physiology, terminology, and prevention of disease transmission, for CPR certification from the American Heart Association and/or the American Red Cross.

PE 110 Beginning Badminton (1,1.5)

2 or 3 hours lecture/laboratory

Note: Maximum of 4 completions in any combination of PE 110, PE 111**Transfer acceptability:** CSU; UC

Recreational and competitive skill levels for beginner and advanced beginner. A development of mental and physical skills such as: interpreting rules and regulations, tactics and strategies, sport etiquette and sport-specific motor skills.

PE 111 Intermediate Badminton (1,1.5)

2 or 3 hours lecture/laboratory

Note: Maximum of 4 completions in any combination of PE 110, PE 111**Transfer acceptability:** CSU; UC

Development of competency in badminton strokes, and defensive and offensive tactics in singles and doubles match play.

PE 112 Yoga (1,1.5,2)

2, 3 or 4 hours lecture/laboratory

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

Investigation and practice of the principles of Physical Hatha Yoga. Emphasis is on improved body alignment, joint flexibility, muscle tone and breathing.

PE 114 Walkfit (1,1.5)

2 or 3 hours lecture/laboratory

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

Instruction and training in walking techniques to increase endurance and fitness levels.

PE 115 Bowling (1.5)

3 hours lecture/laboratory

Transfer acceptability: CSU; UC

Competency development in selection of ball, approach, delivery, scoring, and league experience. Class meets off-campus.

PE 116 Aikido (1,1.5,2)

2, 3, or 4 hours lecture/laboratory

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

Introduction to and a survey of Aikido, a non-aggressive, non-competitive martial art. Based upon a philosophy that underscores the importance of harmony with nature and control of body and mind. The significance of good posture, physical skill, reflexes, responsibility, and etiquette is emphasized.

PE 117 Beginning Golf (1,1.5)

2 or 3 hours lecture/laboratory

Note: Maximum of 4 completions in any combination of PE 117, PE 118, PE 119, PE 216 (Golf)**Transfer acceptability:** CSU; UC

Skill development in the use of various clubs, scoring, and playing etiquette.

PE 118 Intermediate Golf (1,1.5)

2 or 3 hours lecture/laboratory

Note: Maximum of 4 completions in any combination of PE 117, PE 118, PE 119, PE 216 (Golf)**Transfer acceptability:** CSU; UC

A course designed for those students who are not ready to play on a regulation golf course but have mastered the basic skills of beginning golf. This course will include the techniques (pitching, chipping, putting, sand shots and wood shots) that should enable the student to play a successful round of golf. Rules, situation analysis, and course strategy will also be covered.

PE 119 Advanced Golf (1,1.5)

2 or 3 hours lecture/laboratory

Note: Maximum of 4 completions in any combination of PE 117, PE 118, PE 119, PE 216 (Golf)**Transfer acceptability:** CSU; UC

Development of playing strategies. Emphasis on swing techniques and mental approach to golf game. Wise use of practice time. Competency in the rules of golf. Classes held off-campus.

PE 120 Beginning Surfing (1,1.5)

2 or 3 hours lecture/laboratory

Note: May be taken 4 times; maximum of 4 completions in any combination of PE 120; 121**Transfer acceptability:** CSU

Introduction to beginning surfing is designed to meet the needs of the beginning level surfer. Instruction will cover such topics as: historical perspectives of surfing, ocean safety, surfing etiquette, wave selection, proper paddling and appropriate take-off procedures. Students will be required to provide their own equipment.

PE 121 Intermediate Surfing (1,1.5)

2 or 3 hours lecture/laboratory

Note: May be taken 4 times; maximum of 4 completions in any combination of PE 120; 121**Transfer acceptability:** CSU

Concepts of intermediate surfing are designed for the intermediate level surfer who can negotiate waves and do basic turns on a consistent basis. Ocean knowledge such as currents, wave development, wind pattern and ocean floor terrain will be presented. Students will be taught short and longboard maneuvers such as: Duck dive, cutback, "off the lip", roundhouse, sideslip, crossover and walk to nose. Students will become confident in riding surf, four feet or larger. Students will be required to provide their own equipment.

PE 125 Physical Fitness (1,1.5,2)

2, 3, or 4 hours lecture/laboratory

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

Training in endurance, flexibility, and strength. Methods to achieve training include: swimming, running, walking, step bench, weight training, strength training, and/or cycling. Emphasis is on pre-testing, post-testing, and the development of personal fitness.

PE 127 Aquatic Exercises (1,1.5,2)

2, 3, or 4 hours lecture/laboratory

Transfer acceptability: CSU; UC

Rhythmical and aerobic movement in water designed to improve flexibility, strength, and endurance.

PE 128 Wellness Activities (1,1.5,2)

2, 3, or 4 hours lecture/laboratory

Note: Open entry/Open exit; Credit/No Credit grading only; may not be taken as an audit.**Transfer acceptability:** CSU; UC

Physical conditioning through aerobic fitness, flexibility, and resistance training programs. Activities include treadmill, stairmaster, stationary biking, rowing, and weight machines. Individualized tests determine the conditioning program and the level of performance expected.

PE 129 Aerobics/Step (1,1.5,2)

2, 3, or 4 hours lecture/laboratory

Transfer acceptability: CSU; UC

Improve cardiovascular fitness through a variety of aerobic exercises. The development of strength, endurance, flexibility, and coordination using optional resistance equipment such as step benches, hand weights, and flex bands.

PE 130 Individualized Fitness Exercise (1,1.5,2)

2, 3, or 4 hours lecture/laboratory

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

An interdisciplinary course focusing on specific aspects of fitness including physical, mental, and emotional parameters. May include, but not limited to, physical performance, stress management, weight management, self-esteem, behavior modification, and injury rehabilitation.

PE 132 Intermediate Skiing (1,1.5)

2 or 3 hours lecture/laboratory

Transfer acceptability: CSU; UC

Intermediate snow skiing. Emphasis on performance, techniques and conditioning. Intermediate techniques on dry land.

PE 135 Beginning Swimming (1,1.5)

2 or 3 hours lecture/laboratory

Note: Maximum of 4 completions in any combination of PE 135, PE 136, PE 214 (Swimming)

Transfer acceptability: CSU; UC

Basic swimming strokes with an emphasis on skill development.

PE 136 Intermediate Swimming (1,1.5)

2 or 3 hours lecture/laboratory

Note: May be taken 4 times; maximum of 4 completions in any combination of PE 135, PE 136, PE 214 (Swimming)

Transfer acceptability: CSU; UC

Intermediate swimming strokes, starts, and turns. Basic diving techniques, water survival, and rescue techniques. Emphasis on skill development and conditioning.

PE 137 Water Polo (1)

2 hours lecture/laboratory

Note: May be taken 4 times; maximum of 4 completions in any combination of PE 137, PE 170 (Water Polo), PE 214 (Water Polo)

Transfer acceptability: CSU; UC

Development of ball-handling skills, swimming conditioning, performance of offensive and defensive tactics, and game strategies.

PE 140 Beginning Tennis (1,1.5)

2 or 3 hours lecture/laboratory

Note: Maximum of 4 completions in any combination of PE 140, PE 141, PE 142, PE 216 (Tennis)

Transfer acceptability: CSU; UC

Introduction to basic tennis strokes, footwork, rules, and scoring.

PE 141 Intermediate Tennis (1,1.5)

2 or 3 hours lecture/laboratory

Note: May be taken 4 times; maximum of 4 completions in any combination of PE 140, PE 141, PE 142, PE 216 (Tennis)

Transfer acceptability: CSU; UC

Competency development in tennis strokes, defensive and offensive tactics, and match play.

PE 142 Advanced Tennis (1,1.5)

2 or 3 hours lecture/laboratory

Note: Maximum of 4 completions in any combination of PE 140, PE 141, PE 142, PE 216 (Tennis)

Transfer acceptability: CSU; UC

Designed primarily for competitive play with stress on court position and strategy.

PE 150 Beginning Weight Training (1,1.5)

2 or 3 hours lecture/laboratory

Note: Maximum of 4 completions in any combination of PE 150, PE 151

Transfer acceptability: CSU; UC

Developing basic skills, coordination, muscular tone, and strength through the use of weight machines and free weights.

PE 151 Intermediate Weight Training (1,1.5)

2 or 3 hours lecture/laboratory

Note: Maximum of 4 completions in any combination of PE 150, PE 151

Transfer acceptability: CSU; UC

Advanced work for toning and muscular development through the use of weights, variable resistance machines, and other weight devices.

PE 155 Beginning Volleyball (1,1.5)

2 or 3 hours lecture/laboratory

Note: Maximum of 4 completions in any combination of PE 155, PE 156, PE 157, PE 170 (Volleyball)

Transfer acceptability: CSU; UC

Beginning skills in volleyball including passing, setting, hitting, and serving. Drills and team play.

PE 156 Intermediate Volleyball (1,1.5)

2 or 3 hours lecture/laboratory

Note: May be taken 4 times; maximum of 4 completions in any combination of PE 155, PE 156, PE 157, PE 170 (Volleyball)

Transfer acceptability: CSU; UC

Advanced work on fundamentals including blocking and defense, with emphasis on team drills and team play.

PE 157 Advanced Volleyball (1,1.5)

2 or 3 hours lecture/laboratory

Note: Maximum of 4 completions in any combination of PE 155, PE 156, PE 157, PE 170 (Volleyball)

Transfer acceptability: CSU; UC

Advanced techniques of volleyball with emphasis on competitive play.

PE 160 Beginning Racquetball (1,1.5)

2 or 3 hours lecture/laboratory

Note: Maximum of 4 completions in any combination of PE 160, PE 161

Transfer acceptability: CSU; UC

Racquetball fundamentals including terminology, etiquette, safety, rules, grip, court position, backhand, forehand, drive serve, and lob serve will be demonstrated and practiced.

PE 161 Intermediate Racquetball (1,1.5)

2 or 3 hours lecture/laboratory

Note: Maximum of 4 completions in any combination of PE 160, PE 161

Transfer acceptability: CSU; UC

Intermediate racquetball skills including ceiling shots, passing shots, corner shots, 3-wall shots, "junk" and z-serves will be demonstrated and practiced in playing matches.

PE 165 Coed Softball (1,1.5)

2 or 3 hours lecture/laboratory

Note: Maximum of 4 completions in any combination of PE 165, PE 170 (Softball)

Transfer acceptability: CSU; UC

Basic skills of slow pitch, fast pitch, and over-the-line softball. Includes rules, basic skills, and play.

PE 166 Basketball (1)

2 hours lecture/laboratory

Transfer acceptability: CSU; UC

Note: Maximum of 4 completions in any combination of PE 166, PE 170 (Basketball), PE 211

Basic basketball skills including passing, shooting, dribbling, ball handling, and rebounding. Team play, offensive sets, and defensive patterns will be emphasized.

PE 168 Soccer (1,1.5)

2 or 3 hours lecture/laboratory

Note: Maximum of 4 completions in any combination of PE 168, PE 170 (Soccer)

Transfer acceptability: CSU; UC

Beginning skills in soccer. Analysis of individual positions, rules, basic drills, and team play.

PE 170 Team Sports (1,1.5)

2 or 3 hours lecture/laboratory

Note: May be taken 4 times; maximum of 4 completions in any combination of courses for the same sport; For Football, PE 170 (Football), PE 210; For Volleyball, PE 155, PE 156, PE 157, PE 170 (Volleyball); For Soccer, PE 168, PE 170 (Soccer); For Softball, PE 165, PE 170 (Softball); For Baseball, PE 170 (Baseball), PE 212; For Basketball, PE 166, PE 170 (Basketball), PE 211; For Wrestling, PE 170 (Wrestling), PE 215, 216 (Wrestling); For Water Polo, PE 137, PE 170 (Water Polo), PE 214 (Water Polo)

Transfer acceptability: CSU; UC

Instruction and participation in team sports for advanced players. Team sports offered include football, volleyball, soccer, softball, baseball, basketball, wrestling, and water polo. See Class Schedule for particular sport(s) offered each semester.

PE 175A Psychology of Specific Athletic Competition – Contact (2)

2 hours lecture

Transfer acceptability: CSU

Psychological, mental, and physical preparation for the competitive athlete.

PE 175B Psychology of Specific Athletic Competition – Minimal Contact (2)

2 hours lecture

Transfer acceptability: CSU

Psychological, mental, and physical preparation for the competitive athlete.

PE 175C Psychology of Specific Athletic Competition – Non-Contact (2)

2 hours lecture

Transfer acceptability: CSU

Psychological, mental, and physical preparation for the competitive athlete.

PE 175D Psychology of Specific Athletic Competition – Skilled (2)

2 hours lecture

Transfer acceptability: CSU

Psychological, mental, and physical preparation for the competitive athlete.

PE 176 Athletic Training (3)

3 hours lecture

Transfer acceptability: CSU; UC

An overview of the field of sports medicine with an emphasis on the prevention, recognition, evaluation, first-aid, and treatment of athletic injuries.

PE 180 Adaptive Outdoor Activities (1,1.5)

2 or 3 hours lecture/laboratory

Note: May be taken 4 times

Transfer acceptability: CSU; UC

Planning of, participation in, and evaluation of a variety of sports and other outdoor activities adapted to disabled students. Emphasis will be on self-reliance, organization of personal belongings, problem solving situations, interpersonal relations, and meeting new challenges.

PE 181 Adaptive Aquatics (1,1.5)

2 or 3 hours lecture/laboratory

Note: May be taken 4 times

Transfer acceptability: CSU; UC

Basic swimming, survival strokes, and water orientation adapted to individual student's disability.

PE 182 Adaptive Weight Training (1,1.5)

2 or 3 hours lecture/laboratory

Note: May be taken 4 times

Transfer acceptability: CSU; UC

Resistance activities designed to meet specific needs of the student with a disability. Development and maintenance of a level of strength, flexibility, and cardiovascular endurance in order to facilitate independence of movement and rehabilitation of specific muscle groups.

PE 183 Adaptive Skiing (1,1.5)

2 or 3 hours lecture/laboratory

Note: May be taken 4 times

Transfer acceptability: CSU; UC

Snow skiing using adapted equipment where appropriate. Field trip to ski area required. Expenses, except for transportation, to be borne by student.

PE 184 Adaptive Body Conditioning (1,1.5)

2 or 3 hours lecture/laboratory

Note: May be taken 4 times

Transfer acceptability: CSU; UC

Training to increase endurance, flexibility, and strength. Emphasis on individual fitness profile.

PE 190 Theory of Softball (2)

2 hours lecture

Transfer acceptability: CSU; UC – PE 101, 190 and 206-225 combined: maximum credit, 8 units

Fastpitch softball rules, playing techniques, coaching strategies, and practice organization. CSU; (UC - max credit for PE 101, 190 and 206-225, 8 units)

PE 197 Topics in Physical Education (.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 Physical Education. See Class Schedule for specific topic offered. Course title will designate subject covered.

PE 205 In-Off Season Sports Conditioning (1,1.5)

2 or 3 hours lecture/laboratory

Note: May be taken 4 times

Transfer acceptability: CSU; UC

In-off season training for men and women preparing for intercollegiate sports. Weights, agility, and running skills will be emphasized.

PE 206 Coaching of Women's Team Sports (1,1.5,2)

2, 3, or 4 hours lecture/laboratory

Note: May be taken 4 times

Transfer acceptability: CSU; UC – PE 101, 190 and 206-225 combined: maximum credit, 8 units

The application and development of knowledge, skills, and strategy as they apply to intercollegiate competition. Fall semester: volleyball and soccer. Spring semester: basketball and softball.

PE 210 Professional Preparation for Football (1,1.5,2)

2, 3, or 4 hours lecture/laboratory

Note: May be taken 4 times; maximum of 4 completions in any combination of PE 170 (Football), PE 210

Transfer acceptability: CSU; UC – PE 101, 190 and 206-225 combined: maximum credit, 8 units

Development of fundamental skills with emphasis on history, rules, styles, game strategy, current developments, preparation of teams for games and weekly practice schedules, and anticipated innovations for the future.

PE 211 Professional Preparation for Basketball (1,1.5,2)

2, 3, or 4 hours lecture/laboratory

Note: Maximum of 4 completions in any combination of PE 166, PE 170 (Basketball), PE 211

Transfer acceptability: CSU; UC – PE 101, 190 and 206-225 combined: maximum credit, 8 units

Development of fundamental skills with emphasis on history, rules, styles, game strategy, current developments, preparation of teams for games and weekly practice schedules, and anticipated innovations for the future.

PE 212 Professional Preparation for Baseball (1,1.5,2)

2, 3, or 4 hours lecture/laboratory

Note: May be taken 4 times; maximum of 4 completions in any combination of PE 170 (Baseball), PE 212

Transfer acceptability: CSU; UC – PE 101, 190 and 206-225 combined: maximum credit, 8 units

Development of fundamental skills with emphasis on history, rules, styles, game strategy, current developments, preparation of teams for games and weekly practice schedules, and anticipated innovations for the future.

PE 214 Professional Preparation for Water Sports (1,1.5,2)

2, 3, or 4 hours lecture/laboratory

Note: May be taken 4 times; maximum of 4 completions in any combination of courses for the same sport: For Swimming, PE 135, PE 136, PE 214 (Swimming); For Water Polo, PE 137, PE 170 (Water Polo), PE 214 (Water Polo)

Transfer acceptability: CSU; UC – PE 101, 190 and 206-225 combined: maximum credit, 8 units

Development of fundamental skills with emphasis on history, rules, styles, game strategy, current developments, preparation of teams for games, weekly practice schedules, and anticipated innovations for the future.

PE 215 Professional Preparation for Wrestling (1,1.5,2)

2, 3, or 4 hours lecture/laboratory

Note: May be taken 4 times; maximum of 4 completions in any combination of PE 170 (Wrestling), PE 215, PE 216 (Wrestling)

Transfer acceptability: CSU; UC – PE 101, 190 and 206-225 combined: maximum credit, 8 units

Development of fundamental skills with emphasis on history, rules, styles, game strategy, current developments, preparation of teams for games and weekly practice schedules, and anticipated innovations for the future.

PE 216 Professional Preparations for Individual Sports (Golf, Tennis, and Wrestling) (1,2)

2 or 4 hours lecture/laboratory

Note: May be taken 4 times; maximum of 4 completions in any combination of courses for the same sport; For Golf, PE 117, PE 118, PE 119, PE 216 (Golf); For Tennis, PE 140, PE 141, PE 142, PE 216 (Tennis); For Wrestling, PE 170 (Wrestling), PE 215, PE 216 (Wrestling)

Transfer acceptability: CSU; UC – PE 101, 190 and 206-225 combined: maximum credit, 8 units

Development of fundamental skills with emphasis on history, rules, styles, game strategy, current developments, preparation for games and matches, weekly practice schedules, and anticipated innovations for the future.

PE 229 Lifeguarding (1.5)

1½ hours lecture

Prerequisite: Ability to swim 500 yards continuously

Transfer acceptability: CSU; UC

Follows American Red Cross curriculum lifeguard training and professional rescuer CPR. National certifications can be earned upon successful completion of two topic areas. An individual will have basic preparation for aquatic lifeguard job opportunities in California.

PE 230 Lifeguarding and Emergency Response (3)

3 hours lecture

Prerequisite: Ability to swim 500 yards continuously

Transfer acceptability: CSU; UC

Follows American Red Cross curriculum lifeguard training, professional rescuer CPR and emergency response. National certifications can be earned upon successful completion of all three topic areas. Prepares an individual for aquatic lifeguard job opportunities in California.

PE 231 Water Safety Instruction (3)

3 hours lecture

Transfer acceptability: CSU; UC

American Red Cross Instructor candidate training and water safety instruction. Follows the National Red Cross instructor course, learning levels of basic swim instruction, aquatic activities, and emergency rescue. National certifications can be earned by students 17 years of age or older upon successful completion of topics. Prepares an individual for teaching job opportunities at an aquatic facility.

PE 232 Teaching Swimming (1,1.5)

2 or 3 hours lecture/laboratory

Transfer acceptability: CSU

Techniques for teaching swimming. Practical experience teaching beginning and intermediate swimming classes under supervision of college instructor.

PE 295 Directed Study in Physical Education (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; UC – Credit determined by UC upon review of course syllabus.

Independent study for students who have demonstrated skills and/or proficiencies in Physical Education 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.

Physical Science (PHSC)

Contact the Physics and Engineering Department for further information, (760) 744-1150, ext. 2505

COURSE OFFERINGS**PHSC 100 Introduction to Physical Science (3)**

3 hours lecture

Transfer acceptability: CSU; UC – No credit for students with prior lecture credit in ASTR, CHEM, GEOL or PHYS

The study of selected topics from the fields of astronomy, geology,

physics, chemistry, and their related sciences through lectures, films, and demonstrations. A general education course designed particularly for non-science majors. For teacher training see PHSC 101.

PHSC 100L Introduction to Physical Science Laboratory (1)

3 hours laboratory

Prerequisite: Completion of, or concurrent enrollment in, PHSC 100
Transfer acceptability: CSU; UC – No credit for students with prior lab credit in ASTR, CHEM, GEOL or PHYS

The study of selected topics from the fields of astronomy, geology, physics, chemistry, and their related sciences through lab exercises. A general education course designed particularly for non-science majors. For teacher training see PHSC 101L.

PHSC 101 Principles of Physical Science (3)

3 hours lecture

Transfer acceptability: CSU

The study of selected topics from the fields of physics and chemistry and their related sciences through lectures, films, and demonstrations. A general education course designed particularly for non-science majors. Especially recommended for teacher training.

PHSC 101L Principles of Physical Science Laboratory (1)

3 hours laboratory

Prerequisite: Completion of, or concurrent enrollment in, PHSC 101

Transfer acceptability: CSU

The study of selected topics from the fields of physics and chemistry and their related sciences through lab exercises. A general education course designed particularly for non-science majors; not open to majors in physics, chemistry, or engineering. Especially recommended for teacher training.

Physics (PHYS)

Contact the Physics and Engineering Department for further information, (760) 744-1150, ext. 2505

COURSE OFFERINGS

*UC credit limitations:

- No credit for PHYS 101 or 102 if taken after 120, 200, or 230
- PHYS 120 and 121 combined with 200, 201, 230, 231, 232: maximum credit, one series
- PHYS 200 and 230 combined: maximum credit, one course
- PHYS 201 and 231 combined: maximum credit, one course

PHYS 101 Introduction to Physics (4)

3 hours lecture-3 hours laboratory

Prerequisite: MATH 50 or one year of high school Algebra

Note: Not open to students with prior credit in PHYS 100, 110, 115, 120, 125, 230, 231, and 232

Transfer acceptability: CSU; UC*

An introductory survey course in classical and modern physics. Not intended for science majors.

PHYS 102 Introduction to Physics (Lecture) (3)

3 hours lecture

Prerequisite: MATH 50 or one year of high school Algebra

Note: Not open to students with prior credit in PHYS 101, 110, 115, 120, 125, 230, 231, and 232

Transfer acceptability: CSU; UC*

An introductory survey course in classical and modern physics. Not intended for science majors.

PHYS 120 General Physics (4)

3 hours lecture-3 hours laboratory

Prerequisite: MATH 110

Recommended preparation: MATH 115

Transfer acceptability: CSU; UC*; CAN PHYS 2; PHYS 120+121= CAN PHYS SEQ A

The fundamental principles of classical mechanics, wave motion, sound, thermodynamics, and fluids.

PHYS 121 General Physics (4)

3 hours lecture-3 hours laboratory

Prerequisite: PHYS 120

Transfer acceptability: CSU; UC*; CAN PHYS 4; PHYS 120+121=CAN PHYS SEQ A

A second-semester continuation of PHYS 120. The fundamental principles of optics, electricity, magnetism, and modern physics.

PHYS 200 Fundamentals of Physics (5)

4 hours lecture – 3 hours laboratory

Prerequisite: Completion of, or concurrent enrollment in, MATH 140

Note: PHYS 200-201 series not recommended for majors in engineering, computer science or physics; PHYS 230 series recommended for majors in engineering, computer science, or physics.)

Transfer acceptability: CSU; UC*

A calculus-based course in classical mechanics, waves, sound, fluids and thermodynamics, with an emphasis on life science, pre-professional, and architectural fields.

PHYS 201 Fundamentals of Physics (5)

4 hours lecture – 3 hours laboratory

Prerequisite: PHYS 200

Recommended preparation: Completion of, or concurrent enrollment in, MATH 141

Note: PHYS 200-201 series not recommended for majors in engineering, computer science or physics; PHYS 230 series recommended for majors in engineering, computer science, or physics.)

Transfer acceptability: CSU; UC*

A calculus-based course in classical electromagnetism, optics and atomic physics, with an emphasis on life science, pre-professional, and architectural fields.

PHYS 230 Principles of Physics (5)

4 hours lecture-3 hours laboratory

Prerequisite: Completion of, or concurrent enrollment in, MATH 141

Recommended preparation: PHYS 120

Transfer acceptability: CSU; UC*; CAN PHYS 8; PHYS 230+231+232=CAN PHYS SEQ B

Classical mechanics, thermodynamics and fluid dynamics. Required for students whose major field is physics, chemistry, or engineering.

PHYS 231 Principles of Physics (5)

4 hours lecture-3 hours laboratory

Prerequisite: PHYS 230 and completion of, or concurrent enrollment in, MATH 205

Recommended preparation: PHYS 121

Transfer acceptability: CSU; UC*; CAN PHYS 12; PHYS 230+231+232=CAN PHYS SEQ B

Classical electromagnetism, electromagnetic waves, and optics. Required for students whose major field is physics, chemistry, or engineering.

PHYS 232 Principles of Physics (4)

3 hours lecture-3 hours laboratory

Prerequisite: PHYS 231 and MATH 205

Transfer acceptability: CSU; UC*; PHYS 230+231+232=CAN PHYS SEQ B

Modern Physics. Required for students whose major field is physics, chemistry, or engineering.

PHYS 295 Directed Study in Physics (1,2,3)

3, 6, or 9 hours laboratory

Prerequisite: Approval of project or research by department chairperson

Note: May be taken 4 times

Transfer acceptability: CSU

Designed for the student who has demonstrated a proficiency in physics subjects and the initiative to work independently on a particular sustained project which does not fit into the context of regularly scheduled classes.

Political Science (POSC)

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

COURSE OFFERINGS

POSC 100 Introduction to Political Science (3)

3 hours lecture

Transfer acceptability: CSU; UC

Introduction to the scope and methods of political science; basic political concepts and policies; comparative government institutions, stressing the United States; an overview of political theories, international politics, and political economy.

POSC 101 Introduction to Politics and American Political Institutions (3)

3 hours lecture

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

Transfer acceptability: CSU; UC

An examination of the development of American political institutions and ideas. Special attention is given to federalism, democracy, the United States Constitution, political ideology, civil liberties and rights, political parties, interest groups, and the role of the media. In explaining the development of the present U.S. Constitution from the time of the 1787 Philadelphia Convention to the present, Political Science 101 includes (amongst other themes) the relationship between different regions and the country in regards to industrialization, tariffs, slavery, treatment of the Native American and different concepts of federalism.

POSC 102 Introduction to United States and California Governments (3)

3 hours lecture

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

Transfer acceptability: CSU; UC

An examination of the structures and functions of the government of the United States and California and how these governments interact with each other within our federal system. The course also explains the contemporary relationships between local governments and the national government. In order to show this interrelationship, the course includes sections on the economy, grant-in-aid programs, federal mandates and the making of foreign policy.

POSC 110 Introduction to World Politics (3)

3 hours lecture

Transfer acceptability: CSU; UC

Sources and uses of power in the arena of international politics. Causes and consequences of 20th century wars. The balance of power, history, geography, military and economic potential will be examined to show their impact on foreign policies of the United States, Europe, Russia, Japan, China and less-developed states. Uses of military force, economic leverage, diplomacy, law, etc., discussed as approaches to limit war.

POSC 120 California Government (1)

1 hour lecture

Transfer acceptability: CSU

Intended for students who have completed the American History and Institutions requirements for the A.A. Degree or CSU General Education, but have not met the California Constitution requirement. Organization and operation of California state and local government. Stress upon citizen participation in the decision-making process.

POSC 125 Contemporary World Problems (3)

3 hours lecture

Transfer acceptability: CSU; UC

Focus is on three issue-areas: war and group conflict; population growth and movement; and change and cultural values. Other current issues may also be examined.

POSC 130 Introduction to Public Administration (3)

3 hours lecture

Transfer acceptability: CSU; UC

A survey of the key issues in public administration, urban planning, public personnel administration, and public safety with an emphasis on governmental structure and the public decision-making process as

it pertains to the effectiveness of criminal justice policies, zoning, and land use considerations.

POSC 197 Political Science 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 Political Science. See Class Schedule for specific topic offered. Course title will designate subject covered.

POSC 295 Directed Study in Political Science (1,2,3)

3, 6 or 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 designed for advanced students who have demonstrated a proficiency in political science 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.

Psychology (PSYC)

Contact the Behavioral Sciences Department for further information, (760) 744-1150, ext. 2329. 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

Psychological and Social Services

Provides the student with the academic training and hands-on experience for entry-level employment in human services and serves as preparation for upper division course work.

A.A. Degree Major or Certificate of Achievement

Program Requirements		Units
PSYC 100	Introduction to Psychology	3
SOC 100	Introduction to Sociology	3
SOC 110	Social Problems	3
PSYC/SOC 140	Intro to Psychological and Social Services	3
PSYC 225	Psychology of Abnormal Behavior	3
PSYC 235	Learning/Behavior Modification	3
COUN 100	Introduction to Basic Counseling Skills	3
PSYC/SOC 298	Directed Field Experience I	3
Electives (Select 3 units)		
PSYC 115	Psychology of Personal Growth	3
PSYC 110	Developmental Psychology – Child/Adult	3
PSYC/SOC 105	Marriage and the Family	3
PSYC/SOC 145	Psychology and Sociology of Aging	3
PSYC/SOC 155	Physiology/Pharmacology of Psych Drugs	3
PSYC/SOC 120	Social Psychology	3
TOTAL UNITS		27

Completion of additional psychology or sociology courses in alcohol/drug studies prepares students for eligibility to take California state examinations to become certified addictions treatment specialists by CAADE and certified alcoholism and drug abuse counselors by CAADAC.

Alcohol/Drug Courses Required for Eligibility for State Examinations

PSYC 100	Introduction to Psychology	3
SOC 100	Introduction to Sociology	3
PSYC 225	Psychology of Abnormal Behavior	3

PSYC/SOC 150	Introduction to Chemical Dependency	3
PSYC/SOC 155	Physiology/Pharmacology of Psych Drugs	3
PSYC/SOC 160	Chemical Dependency Treatment	3
PSYC/SOC 250	Group Leadership and Group Processes	3
PSYC/SOC 255	Chemical Dependency Case Management	3
PSYC/SOC 260	Chemical Dependency Family Counseling	3
PSYC/SOC 140	Intro to Psychological and Social Services	3
PSYC/SOC 298	Directed Field Experience I	3
PSYC/SOC 299	Directed Field Experience II	3

COURSE OFFERINGS

PSYC 100 Introduction to Psychology (3)

3 hours lecture 3

Transfer acceptability: CSU; UC; CAN PSY 2

A general introduction to the principles of human and animal behavior. Topics covered include history of psychology, research thinking, intelligence, lifespan development, gender and human sexuality, motivation and emotion, health psychology, personality, psychological disorders, therapy, social psychology, and other related topics (e.g., industrial/organizational psychology, sports psychology, environmental psychology, forensic psychology). Emphasis is placed upon the relationship between general principles of psychology and their practical applications.

PSYC 105 Marriage, Family, and Intimate Relationships (3)

3 hours lecture

Note: Cross listed as SOC 105

Transfer acceptability: CSU, UC

A study of the psychology and sociology of the family and intimate relationships. Emphasizes factors that enhance interpersonal relationships. Topics include love, marital choice, communication, conflict, and changing models of the family. Examines cross-cultural and historical factors that impact the family as a social institution and the impact of gender, race and ethnicity, social class, age, and sexual orientation on family organization.

PSYC 110 Developmental Psychology – Child Through Adult (3)

3 hours lecture

Transfer acceptability: CSU; UC

A chronological study of human growth and development throughout the lifespan. Heredity and environmental determinants of behavior and developmental research methods are emphasized. The importance of social experience in the family, school, peer groups, and society are examined.

PSYC 115 The Psychology of Personal Growth and Development (3)

3 hours lecture

Transfer acceptability: CSU

Emphasis on self-understanding through the study of the individual and relationships which contribute to unique personal development; application of the fundamental concepts of psychology which aid in examining one's own personal environment and the interaction with that environment.

PSYC 120 Social Psychology (3)

3 hours lecture

Note: Cross listed as SOC 120

Transfer acceptability: CSU; UC

Explores relationships between the behavior of individuals and the structure of society. Emphasizes the importance of language, roles, and the concepts of the self in the socialization process.

PSYC 125 Human Sexuality (3)

3 hours lecture

Note: Cross listed as SOC 125

Transfer acceptability: CSU; UC

Survey of topics pertinent to an understanding of the development of human sexuality. Emphasis on biological, psychological, and cultural determinants of sexual behavior. Current sex norms and various aspects of interpersonal and individual sexual adjustment.

PSYC 130 Psychology of Women (3)

3 hours lecture

Transfer acceptability: CSU; UC

A psychological exploration of the ways that race, ethnicity, class,

sexual orientation, and age modify women's experience. To be included are such areas as communication, mental health, sex-role socialization, body image, family, and sexuality issues. Course content will be relevant to both females and males.

PSYC 140 Introduction to Psychological and Social Services (3)

3 hours lecture-3 hours laboratory

Recommended preparation: PSYC 100 or SOC 100

Note: Cross listed as SOC 140

Transfer acceptability: CSU

Community resources and techniques in the helping professions. Students will gain familiarity with community agencies and their functions, and learn specific techniques useful for working in such settings. Included will be techniques of interviewing, assessment, intervention, and referral. Volunteer work in agencies is required.

PSYC 145 Psychology and Sociology of Aging (3)

3 hours lecture

Note: Cross listed as SOC 145

Transfer acceptability: CSU

A multi-disciplinary approach to the field of gerontology; historical, demographic, psychological, and sociological aspects of aging.

PSYC 150 Introduction to Chemical Dependency (3)

3 hours lecture

Recommended preparation: PSYC 100, PSYC/SOC 140, and SOC 100 or 110

Note: Cross listed as SOC 150

This basic course will provide a historical perspective on alcohol and other psychoactive drug abuse and its impact on the community. An interdisciplinary approach will be used. Topics will include definitions, sociocultural factors related to use and/or abuse, identification of issues and models of dependency and recovery, and analysis of the effectiveness of policies and programs.

PSYC 155 The Physiology and Pharmacology of Psychoactive Drugs (3)

3 hours lecture

Recommended preparation: PSYC 100

Note: Cross listed as SOC 155

This course will examine how psychoactive drugs affect the nervous system. Ways of classifying drugs will be identified including the processes of physical and psychological dependence, tolerance, withdrawal, and genetic predispositions. Temporary and permanent consequences of specific drugs will include: nutritional deficiencies, Korsakoff's syndrome, impact on sexual functioning, brain effects (including memory consequences), and behavioral consequences..

PSYC 160 Chemical Dependency Treatment (3)

3 hours lecture

Recommended preparation: PSYC 100, PSYC/SOC 140, and SOC 100 or SOC 110

Note: Cross listed as SOC 160

This course will examine legal and ethical aspects of psychoactive drug use including employment issues, patients' rights, and confidentiality. There will be an in-depth study and evaluation of different models for intervention, recovery, and prevention with an emphasis on gender, community, and cultural issues.

PSYC 197 Special Topics in Contemporary Psychology (1,1.5,2,3)

1, 1½, 2, or 3 hours lecture

Note: May be taken 2 times

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

Current topics of special interest to psychology students will be debated and discussed in a seminar format. Issues in such areas as social psychology, perception and learning, personality, and others will be analyzed from theoretical and methodological perspectives. Content will change from semester to semester.

PSYC 205 Statistics for the Behavioral Sciences (3)

3 hours lecture

Prerequisite: A minimum grade of "C" in MATH 56 or 60 or eligibility determined through the math placement process

Note: Cross listed as SOC 205

Transfer acceptability: CSU; UC - PSYC/SOC 205, MATH 120, and BIOL 215 combined: maximum credit, one course; CAN PSY 6

Quantitative methods as applied to behavioral science data. Frequency distributions, measure of central tendency, variability, theory of error, measures of significance, correlation, regression, and an introduction to analysis of variance. Also included is an introduction to the use of computers in statistics.

PSYC 205L Data Analysis in Psychology and Sociology (1)

3 hours laboratory

Corequisite: PSYC/SOC 205

Note: Cross listed as SOC 205L

Transfer acceptability: CSU; UC

Use of the computer as a tool for calculating statistics and exploring data in Psychology and Sociology.

PSYC 210 Physiological Psychology (4)

3 hours lecture-3 hours laboratory

Prerequisite: PSYC 100

Transfer acceptability: CSU; UC; CAN PSY 10

An examination of the biological basis of behavior. Topics to be covered include neuroanatomy, drug use and addiction, reproductive behavior, "mental" illness, neurological disorders and sleep processes. Laboratory includes neuroanatomical dissection.

PSYC 225 Psychology of Abnormal Behavior (3)

3 hours lecture

Prerequisite: PSYC 100

Transfer acceptability: CSU; UC

Identification and description of the various types of psychological abnormalities, deficiencies, and disorders which may interfere with a human individual's ability to cope with the demands of the surroundings. All of the major psychiatric categories will be covered as well as the types of personality problems which lead to domestic, social, and economic inadequacies, and in some instances, to difficulties with the law.

PSYC 230 Research Methods in Psychology (4)

3 hours lecture-3 hours laboratory

Prerequisite: PSYC 100, PSYC/SOC 205, ENG 100

Transfer acceptability: CSU; UC

Introduction to psychological research methods with emphasis on the use of the scientific method in psychological research. The laboratory is designed to complement the lectures and allow each student to design and conduct psychological research.

PSYC 235 Principles of Learning and Behavior Modification (3)

3 hours lecture

Transfer acceptability: CSU; UC

The basic principles and research in classical conditioning, operant conditioning, cognitive learning processes, the impact of biochemical processes on learning, and application of behavior modification techniques for changing behavior.

PSYC 250 Group Leadership and Group Process (3)

3 hours lecture

Recommended preparation: PSYC/SOC 150, PSYC/SOC 155, and PSYC/SOC 160

Note: Cross listed as SOC 250

An introduction to the dynamics of group interaction with emphasis upon the individual's firsthand experience as the group studies itself under supervision. The factors involved in problems of communication, effective emotional responses, and personal growth will be highlighted. The emphasis will be upon group process as a means of changing behavior.

PSYC 255 Chemical Dependency Case Management (3)

3 hours lecture

Recommended preparation: PSYC/SOC 150, PSYC/SOC 155, PSYC/SOC 160

Note: Cross listed as SOC 255

Techniques used for beginning and crisis counseling, intake interviewing, and referral will be studied and practiced. Attention will be given to the appropriate strategies of intervention, the admitting process, and the recording of information as it pertains to alcohol and drug abuse clients/residents. Though experiential in format, participants will learn and practice skills in attentive listening and recognizing and responding to different levels of client

communication. Students will demonstrate a knowledge of community resources and how to make appropriate referrals.

PSYC 260 Chemical Dependency Family Counseling (3)

3 hours lecture

Recommended preparation: PSYC/SOC 150, PSYC/SOC 155, PSYC/SOC 160

Note: Cross listed as SOC 260

This course is designed to explore methods of assisting significant others (family, employer, etc.) to understand and to cope in dealing with the alcohol and drug abuse of alcoholics and addicts. The approach will be to analyze and examine the ideas and dynamics of those relationships and to develop practice strategies for the worker who counsels these persons. The approach will be experiential in format and students will participate in exercises that lead to the development of these skills.

PSYC 296 Special Problems in Psychology (1,2,3)

1, 2, or 3 hours lecture

Note: May be taken 4 times

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

An individualized or group project in psychology of any nature approved by, and under the personal supervision of, the instructor.

PSYC 298 Directed Field Experience I (3)

3 hours lecture-5 hours laboratory

Prerequisite: PSYC/SOC 140, and acceptance into the Psychological and Social Services Certificate Program

Note: Cross listed as SOC 298

Transfer acceptability: CSU

Supervised field work in various community agencies in the psychological and social service areas. Agencies are selected with regard to student's area of specialization.

PSYC 299 Directed Field Experience II (3)

3 hours lecture-8 hours laboratory

Prerequisite: PSYC/SOC 250, PSYC/SOC 255, PSYC/SOC 260, PSYC/SOC 298

Note: Cross listed as SOC 299

Supervised field work in various community agencies in the psychological and social service areas. Agencies are selected with regard to student's area of specialization.

Public Administration (PA)

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

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

Public Administration

This certificate program is designed for transfer into San Diego State University's program leading to a degree in Public Administration.

Assists in improving skills to take management positions and/or meet professional growth requirements in local government. Transfer students should consult the four-year college or university catalog for specific requirements or see a Palomar College counselor.

In order to earn a certificate, students must achieve a minimum grade of "C" in each of the certificate program courses.

A.A. Degree Major or Certificate of Achievement

Required Courses		Units
ACCT 103	Financial Accounting	4
BUS 205	Business Writing	3
ECON 102	Principles of Economics (Micro)	3

MATH 120	Elementary Statistics	3
POSC 101	Intro to Politics/American Political Institutions	3
POSC 102	Intro to United States/California Governments	3
POSC 130	Introduction to Public Administration	3
TOTAL UNITS		22

Public Works Management (PWM)

Contact Occupational & Noncredit Programs for further information, (760) 744-1150, ext. 2284

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

Public Works Management

Specifically designed for individuals employed by or seeking employment in public works organizations in San Diego County.

A.A. Degree Major or Certificate of Achievement

Program Requirements		Units
PWM 50	Introduction to Public Works	3
PWM 51	Road Construction and Maintenance	3
PWM 52	Concrete and Cement Construction	3
PWM 53	Public Works Inspection I	3
PWM 54	Public Works Inspection II	3
PWM 55	Public Works Administration	3
PWM/WTE/		
WWT 125	Supervision	3
PKS 101	Parks Maintenance	3
CSIS/		
RCSIS 120	Microcomputer Applications	3
BUS 125	Business English	3
TOTAL UNITS		30

COURSE OFFERINGS

Courses numbered under 100 are not intended for transfer credit.

PWM 50 Introduction to Public Works (3)

3 hours lecture

Designed by the American Public Works and Maintenance Superintendents Associations in order to prepare public works and maintenance workers for lead and supervisory positions. Students will receive an introduction to techniques; materials and equipment used in public works, maintenance and repair projects.

PWM 51 Road Construction and Maintenance (3)

3 hours lecture

Recommended preparation: MATH 15

Provides instruction on street construction and maintenance; including materials and methods, specifications, records and cost accounting systems, revenue sources and budget preparation. Other subjects include safety, drainage, equipment records and specifications, as well as public relations. Codes and industry standards that pertain to improvements and repair will be reviewed.

PWM 52 Concrete and Cement Construction (3)

3 hours lecture

Recommended preparation: MATH 15

Provides instruction on the recommended procedures, practices, and testing criteria used by the Asphalt Institute highlighting local city and county asphalt requirements. Content includes specifications for roads, runway floors, and hydraulic structures and Portland Cement concrete design and uses. Includes transporting, placing, curing, and testing concrete as well as application and construction methods employed.

PWM 53 Public Works Inspection I (3)

3 hours lecture

Recommended preparation: MATH 15

Provides an overview of the inspector's role and responsibilities as it relates to a project. The student will be given the necessary information and training necessary for entry level inspection responsibilities. The course will apply to construction of municipal infrastructure and civil engineering type projects.

PWM 54 Public Works Inspection II (3)

3 hours lecture

Recommended preparation: MATH 15

Provides detailed instruction on more complex inspection tasks associated with public works construction. Topics include specific inspection methods for traffic signal installations, inspection techniques for street lighting system installations, inspection of street striping and markings, inspection of pipe rehabilitation systems, and inspection and construction methods of modified asphalts, pavements, and processes. Advanced material quantity estimating and technical report writing will be emphasized.

PWM 55 Public Works Administration (3)

3 hours lecture

Provides an introduction to the organizational concepts used by the Public Works Department. Content includes typical organization, management concepts, political considerations, planning, financial management and public relations.

PWM 125 Supervision (3)

3 hours lecture

Note: Cross listed as WTE/WWT 125

Managerial aspects of public utilities including organization, decision making, coordination, communication, and public relations. Personnel management including recruiting, training, evaluation, discipline, promotion, morale, and grievances. Safety programs and encouraging safe conditions, actions and attitudes.

Quality Assurance Technology (QAT)

Contact Occupational & Noncredit Programs for further information, (760) 744-1150 ext. 2284

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

Quality Assurance Technology

Prepares students to pursue a career in quality assurance. QAT 110, 120, and 121 prepares students for the Certified Quality Engineer (CQE) exam. QAT 115 prepares students for the Certified Mechanical Inspector (CMI) exam. QAT 125 prepares students for the Certified Reliability Engineer (CRE) exam.

A.A. Degree Major or Certificate of Achievement

Program Requirements		Units
QAT 100	Quality Assurance Concepts/TQM	3
QAT 105	QAT Communication/Human Factors	3
QAT 115	Inspection Techniques and Application	3
QAT 120	Planning/Analysis - Theory/Principles	3
QAT 121	Planning/Analysis - Tech/Applications	3
QAT 130	Introduction to ISO 9000	3
QAT 135	Quality System Auditing	3

Electives (Select 3-4 units)

QAT 110	Statistical Quality Control - Theory	3
QAT 125	Quality and Reliability Management	3
QAT 197	Quality Assurance Technology Topics	3,4
CE 100*	Cooperative Education	3,4

TOTAL UNITS 24 - 25

* Cooperative Education must be related to this major

COURSE OFFERINGS**QAT 100 Quality Assurance Concepts/TQM (3)***3 hours lecture*

Designed to present the total quality control functional concepts and techniques as presently used by industry.

QAT 105 Quality Assurance Control Communication and Human Factors (3)*3 hours lecture*

Focuses on oral communication and presentations in the workplace environment. Includes preparing, recording, processing, storing, communicating, and retrieving quality reports, and techniques of relating Quality Assurance information within business and the community.

QAT 110 Statistical Quality Control – Theory (3)*3 hours lecture***Recommended preparation:** QAT 100

Basic statistical concepts of quality control which have a wide range of industrial applications. Methods used in many countries throughout the world to improve product and process quality and reduce costs, e.g., various types of acceptance sampling systems and procedures. Methods are presented for evaluation of sample data and determining population characteristics including measures of central tendency and variation, and underlying distributions.

QAT 115 Inspection Techniques and Application (3)*3 hours lecture*

Basic inspection concepts as applied to the fabrication and assembly of mechanical and electrical components; fundamental tools and techniques of measurement as applied to inspection and quality control. Fundamental blueprint reading reviewed, including geometric positioning.

QAT 120 Planning and Analysis – Theory and Principles (3)*3 hours lecture***Recommended preparation:** QAT 100

Fundamentals of organizing and planning for the economic control and assurance of product quality.

QAT 121 Planning and Analysis – Techniques and Applications (3)*3 hours lecture*

An introduction to basic concepts of quality planning and analysis, designing for quality and using statistical aids, supplier relations, manufacturing planning and using statistical aids, manufacture process control concepts and techniques, inspection and test, measurement, customer relations, field use and quality, consumer relations, product safety and liability; policies and objectives, developing the Quality organization, and Quality information systems. Application of TQM, Deming, and ISO 9000 concepts.

QAT 125 Quality and Reliability Management (3)*3 hours lecture***Recommended preparation:** QAT 100

Introduction to basic concepts of quality assurance and reliability management; the assurance sciences (quality control, reliability, maintainability and availability); probability and statistics; product reliability; equipment survival, reliability prediction methods; reliability testing, product availability, and reliability apportionment techniques.

QAT 130 Introduction to ISO 9000 (3)*3 hours lecture*

In-depth knowledge of quality system standards required for ISO 9000 Quality Management Systems. Participants will be provided the information, skills, and tools necessary to develop, implement and monitor an ISO 9000 quality program. Students will participate in developing an ISO 9000 quality system manual that will address several quality system requirements. In addition, students will be introduced to the Harmonized European Standards required to CE Mark products for International sale in Europe. These European standards include EN 46001 and the Medical Device Directive required for selling medical device products internationally.

QAT 135 Quality System Auditing (3)*3 hours lecture*

Introduction to the principles and practices of effective quality auditing. Necessary information, tools, and techniques will be provided to guide students with the development of skills and confidence to effectively conduct internal and external quality audits. Audit phases include planning, preparing, performing, reporting, and audit follow-up. Quality system audits are a vital tool for upper management which facilitates continuous improvement. A matrix of several quality system standards including ISO 9001 will be utilized extensively.

QAT 197 Quality Assurance Technology Topics (.5-4)

Units awarded in topics courses are dependent upon the number of hours required by 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

Concentrated courses in Quality Assurance Technology. May be repeated with new subject matter. Course title will designate subject covered.

Radio and Television (RTV)**See also Communications**

Contact the Communications Department for further information, (760) 744-1150, ext. 2440

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 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
CINE/		
RTV 125 or	Beginning Film/Video Field Production	
GC/RGC 140	Digital Imaging/Photoshop I	3
RTV 270	Computer Video Editing	3
GC 204	Motion Graphics/Multimedia-A	3
GC 207	Motion Graphics/Multimedia-B	3
RTV 275	Avid Editing for Television & Film	3
TOTAL UNITS		15

The Digital Media program is also offered in Graphic Communications.

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/RGC 140	Digital Imaging/PhotoShop 1	3
GC 165	Digital Video Design	3
GC 204	Motion Graphics for Multimedia-A	3
GC 207	Motion Graphics for Multimedia-B	3
RTV 125	Beginning Film and 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 (Select 2 courses, 6 Units total)		Units
RTV 50	Basic Television Acting	3
RTV 110	Broadcast Writing and Producing	3
RTV/		
ENTT 120	Basic Television Production	3
RTV 150	Performance/Acting for Broadcast/Film	3
RTV 170	Introduction to Video Editing	3
RTV 225	Intermediate Film/Video Field Production	3
GC 142	Digital Imaging/PhotoShop III	3
GC/RGC 152	Desktop Publishing with Illustrator	3
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
ART 243	Digital 3D Design and Modeling	3
ART 247	Computer Animation/Multimedia II	3
DT 180	3D Studio Max - Intro to 3D Modeling/Animation	3
TOTAL UNITS		30

The Digital Video program is also offered in Graphic Communications.

Radio and Television

Provides entry-level skills in the field of radio and television broadcasting.

A.A. Degree Major or Certificate of Achievement

Certificates of Achievement or Proficiency require a minimum grade of "C" in each of the required courses.

Required Courses		Units
RTV 240	Television News	4
ENTT/RTV 294B or	Television Internship/Production	
RTV 294A	Radio Programming Projects	1
RTV 100	Introduction to Electronic Media	3
RTV 110	Broadcast Writing and Producing	3
ENTT/RTV 120	Basic Television Production	3
CINE /RTV 125	Beg Film/Video Field Production	3
ENTT/RTV 130	Radio Production	3
RTV 160	Broadcast Advertising	3
RTV 220*	TV Production and Direction	3
CINE/RTV 225	Intermediate Film/Video Field Production	3

Electives (Select 6 units, maximum 6 units from RTV 194A, 194B, 294A, and 294B)

RTV 100L	Introduction to Radio and Television Laboratory	1
RTV 115	Creative Writing for TV/Cinema	3
RTV 124	Staging and Lighting for Television	3
RTV 135	Beginning Radio Station Operations	1,2,3
RTV 136	Advanced Radio Station Operations	1,2,3
RTV 140	Radio News	3
RTV 150	Performance/Acting for Broadcast/Film	3
RTV 170	Introduction to Video Editing	3
RTV 194A	Radio Operations	1,2,3
RTV 194B	Exp Topics/TV Operations	1,2,3
RTV 230	Digital Audio with Pro Tools	3
RTV 270	Digital Video Editing	3
RTV 275	Avid Editing for Television and Film	3
RTV 294A	Radio Programming Projects	1,2,3
ENTT/RTV294B	Television Internships/Production	1,2,3
CE 100	Cooperative Education	1,2,3,4
TOTAL UNITS		35

* Students who are not planning to transfer to four-year university and who have a radio emphasis may substitute RTV 230 for RTV 220.

COURSE OFFERINGS

Courses numbered under 100 are not intended for transfer credit.

RTV 50	Basic Television Acting	(1)
<i>3 hours laboratory</i>		
Note: May be taken 3 times		
Practice and performance in the basics of television acting. Special emphasis on movement for the camera, emotion, gestures, voice, techniques to copy interpretation, audition processes, agent and		

industry information. Prepares the actor for basic television acting through a variety of on-camera exercises and final productions.

RTV 100 Introduction to Electronic Media (3)

3 hours lecture

Transfer acceptability: CSU

A survey of American broadcasting, its development, impact and influence on our society; basic principles, mass communication theory, station operation programming, advertising, rating services, cable television, regulation, and censorship; in-depth analysis of current issues and developments.

RTV 100L Introduction to Radio and Television Laboratory (1)

3 hours laboratory

Transfer acceptability: CSU

Practice in use of radio and television studio equipment. Designed for students who are not Radio-Television majors.

RTV 110 Broadcast Writing and Producing (3)

6 hours lecture/laboratory

Transfer acceptability: CSU

Creating and developing ideas and materials for broadcast. Problems of timing, pacing, visualization, and expression. Techniques of scripting for radio and television.

RTV 115 Creative Writing for Television and Cinema (3)

3 hours lecture

Note: Cross listed as CINE 115

Transfer acceptability: CSU

Instruction and practice in the art of dramatic script writing. Emphasis is placed on the development of the initial story idea into a viable, professional shooting script for television or film.

RTV 120 Basic Television Production (3)

6 hours lecture/laboratory

Note: Cross listed as ENTT 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.

RTV 124 Staging and Lighting for Television (3)

6 hours lecture/laboratory

Transfer acceptability: CSU

A study of the aesthetic considerations and technical practices in sets and graphics design, staging, and lighting for television and film.

RTV 125 Beginning Film and Video Field Production (3)

6 hours lecture/laboratory

Note: Cross listed as CINE 125

Transfer acceptability: CSU; UC – CINE/RTV 125 and 225 combined: maximum credit, one course

A study of the basic techniques of field production using Super 8 or 16mm film or analog or digital video equipment as applied to various cinematic forms. The student will work with a team on a project through the preproduction, shooting, and postproduction phases of storytelling for the screen.

RTV 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.

RTV 135 Beginning Radio Station Operations(1,2,3)

3, 6, or 9 hours laboratory

Prerequisite: RTV/ENTT 130

Corequisite: RTV 294A

Note: May be taken 4 times

Transfer acceptability: CSU

Introduction to radio station operations and audio production skills along with practical exercises using broadcast equipment and techniques.

RTV 136 Advanced Radio Station Operations(1,2,3)

3, 6, or 9 hours laboratory

Prerequisite: RTV 130**Corequisite:** RTV 294A**Note:** May be taken 4 times**Transfer acceptability:** CSU

Advanced radio and audio production skills along with practical exercises using broadcast equipment and techniques. Special emphasis in broadcast management training.

RTV 140 Radio News**(3)**

6 hours lecture/laboratory

Transfer acceptability: CSU

Introduction to the principles of radio news writing, rewriting, editing, gathering (by audio recording and news wire services), and announcing. Student will incorporate learning into the production of radio newscasts for radio station KKSM.

RTV 150 Performance and Acting for Broadcast and Film**(3)**

6 hours lecture/laboratory

Transfer acceptability: CSU

Techniques of preparation and delivery of materials before microphone and camera.

RTV 160 Broadcast Advertising**(3)**

6 hours lecture/laboratory

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

Role and practice of broadcast advertising including marketing and media research, time purchasing, and advertising message design and production.

RTV 170 Introduction to Video Editing**(3)**

6 hours lecture/laboratory

Transfer acceptability: CSU

Covers the technical and theoretical development of film and video editing from its initiation to the present day. Provides an introduction to the basic elements of editing language, the various technical processes used throughout its history, as well as the related skills necessary for good editing.

RTV 194A Radio Operations**(1,2,3)**

3, 6, or 9 hours laboratory

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

Advanced research projects designed to meet the specific needs of student's interest in radio station operations. Projects may be chosen for production by the College or by the individual student.

RTV 194B Experimental Topics - Television Operations**(1,2,3)**

3, 6, or 9 hours laboratory

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

Individual television projects, including operations of television equipment in college-produced television programs or individual productions.

RTV 197 Radio and Television 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 Radio and Television. See Class Schedule for specific topic offered. Course title will designate subject covered.

RTV 220 Television Production and Direction**(3)**

6 hours lecture/laboratory

Prerequisite: RTV/ENTT 120 and RTV 110**Transfer acceptability:** CSU

Techniques and theories of television production and direction. Practice in pre-production planning, staging, studio production, and editing. Duties and responsibilities of director and production crew. Production of fully scripted television programs for airing on cable and broadcast stations.

RTV 225 Intermediate Film and Video Field Production**(3)**

6 hours lecture/laboratory

Prerequisite: A minimum grade of "C" in RTV 110 and CINE/RTV 125**Note:** Cross listed as CINE 225**Transfer acceptability:** CSU: UC – CINE/RTV 125 and 225 combined: maximum credit, one course

Principles, techniques, and theory of field production using digital or analog video or 16mm film equipment. Theory and practice of off-line linear or nonlinear editing.

RTV 230 Digital Audio with Pro Tools**(3)**

6 hours lecture/laboratory

Prerequisite: RTV 130**Transfer acceptability:** CSU

Principles and techniques of editing radio, television, and film audio projects using Pro Tools software and technology. Digitizing audio source material, working knowledge of Pro Tools interface, use of multi-track audio editing system, mic and recording techniques.

RTV 240 Television News**(4)**

8 hours lecture/laboratory

Prerequisite: RTV 120 and 110 or RTV 140**Note:** May be taken 4 times**Transfer acceptability:** CSU

Principles of scripting, gathering, and editing of television news. Production of newscasts for airing on cable television.

RTV 270 Digital Video Editing**(3)**

6 hours lecture/laboratory

Prerequisite: RTV 120 and 170**Transfer acceptability:** CSU

Principles and techniques of digital non-linear video editing. Overview of various software programs for editing, graphics and 3D animation. Application of operational and aesthetic editing principles to specific editing projects.

RTV 275 Avid Editing for Television and Film**(3)**

6 hours lecture/laboratory

Prerequisite: RTV 170 and 270**Transfer acceptability:** CSU

Principles and techniques of editing video and film projects using Avid technology. Digitizing source material, storyboarding, timeline, audio editing, importing and exporting graphics, outputting, and media management.

RTV 294A Radio Programming Projects**(1,2,3)**

3, 6, or 9 hours laboratory

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

Advanced radio projects to meet the specific needs of the student's interest in radio programming. Work on college-produced broadcast productions.

RTV 294B Television Internships/Production**(1,2,3)**

3, 6, or 9 hours laboratory

Note: Cross listed as ENTT 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.

Reading (READ)

Contact Reading Services for further information, (760) 744-1150, ext. 2568

COURSE OFFERINGS

Courses numbered under 50 are non-degree courses.

Courses numbered under 100 are not intended for transfer credit.

READ 5 Corrective Learning and Reading Skills/Learning Disabled**(3)**

2 hours lecture-3 hours laboratory

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

Individualized program for students who have specific learning disabilities. Intensive training in communication skills of reading, listening, and speaking.

READ 10 Spelling (1)

1 hour lecture

Note: May be taken 2 times

Provides necessary skills to increase spelling ability through an introduction to phonetics and the rules of orthography.

READ 11 Spelling II

1 hour lecture

Note: May be taken 2 times

An intensive study and application of techniques necessary to improve college-level spelling ability.

READ 30 Fundamental Reading Skills (2)

4 hours lecture/laboratory

Note: Open Entry/Open Exit; Credit/No Credit grading only; may be taken 3 times

An individualized computer assisted instruction program based on in-depth testing, assessment, prescription and instruction for the improvement of students' reading comprehension. Emphasis is placed on reading skills and their application to college and life skills materials.

READ 47 Reading 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 Reading. See class schedule for specific topic covered. Course title will designate subject covered.

READ 50 Reading Improvement (4)

3 hours lecture-3 hours laboratory

Note: May be taken 3 times

A course designed to improve reading skills. Individual reading problems are diagnosed and improved through a variety of instructional materials and reading techniques. For students who need to remedy difficulties with reading comprehension, vocabulary, and fluency.

READ 110 Power Reading (4)

3 hours lecture-3 hours laboratory

Transfer acceptability: CSU

Intended for students with reading competencies who wish to enhance their reading ability by increasing reading speed, comprehension, fluency, vocabulary, and critical analysis. For students who do not have reading comprehension and vocabulary difficulties.

READ 115 Vocabulary Enhancement (2)

2 hours lecture

Transfer acceptability: CSU

Provides techniques to increase the precision and scope of language for everyday use. Emphasis is on the development of all aspects of college-level vocabulary.

READ 120 Critical Reading (3)

3 hours lecture

Recommended preparation: READ 110

Transfer acceptability: CSU

Conceptual examination and application of critical reading, critical thinking, analysis and logical reasoning in multi-discipline and multi-cultural academic sources. Emphasis on advanced critical reading, logical reasoning/thinking, reflective judgment, and problem-solving skills that will lead to the ability to interpret, analyze, critically evaluate, and advocate ideas.

READ 197 Reading 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 Reading. See Class Schedule for specific topic offered. Course title will designate subject covered.

Real Estate (RE)

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.

PROGRAMS OF STUDY

Escrow

Prepares students for employment as escrow officers.

A.A. Degree Major or Certificate of Achievement

Program Requirements	Units
RE 100 Real Estate Principles	3
RE 105 Real Estate Finance	3
RE 120 Legal Aspects of Real Estate	3
RE 155 Escrow and the Title Procedures	3
RE 156 Advanced Escrow Procedures	3
RE 157 Escrow Problems	3

Electives (Select 2 courses, 5-7 units)

ACCT 103 and	Financial Accounting	
ACCT 104 or	Accounting Electronic Spreadsheet Lab	
BUS 105	Bookkeeping Fundamentals	3,5
BUS 110	Business Mathematics	3
BUS 115 or	Business Law	
BUS 116	Business Law	3
BUS 205	Business Writing	3
OIS 102	Intermediate Keyboarding	3
BMGT 110	Human Resource Management	3
RE 110	Real Estate Appraisal	3
RE 115	Real Estate Practice	3
RE 130	Real Estate Economics	3
RE 135	Real Estate Investments	3
RE 145	Real Estate Exchanges	3
RE 150	Real Estate Income Taxation	2
RE 158	Current Trends in Escrow	3
CE 100*	Cooperative Education	2,3,4
TOTAL UNITS		23 - 25

* Applicable for C.E.A.'s Educational Achievement Award for full time students only. Completion of this certificate also qualifies students for the California Escrow Association's Educational Achievement Award.

Real Estate Appraisal License Preparation

A Real Estate Appraiser Trainee license is required of individuals who are to be employed as appraisers under the control and supervision of licensed or certified real estate appraisers. A license may be obtained by a person who does not immediately intend to be employed by an appraiser. However, no real estate appraisal activity may be performed unless the trainee is in the employ of a licensed or certified real estate appraiser.

Minimum Requirements to qualify to take the Real Estate Salesperson examination:

1. Age – 18 years of age or older.
2. Residence – Must be a legal resident of California.
3. Honesty – License applicants must be honest and truthful.
4. Education – Applicants for the Trainee or Residential license must provide evidence of successful completion of 90 hours of real estate appraisal education, including 15 hours of USPAP (Uniform Standards of Professional Appraisal Practice). Applicants for the Certified Residential license must provide proof of completion of

5. 120 hours of real estate appraisal education (including 15 hours of USPAP). Applicants for the Certified General license must provide evidence of successful completion of 18 hours of real estate education (including 15 hours of USPAP).
5. Experience – No experience is required before obtaining the Real Estate Appraiser Trainee license. 2,000 hours of appraisal experience is required before obtaining the residential license. 2,500 hours of experience is required before obtaining the Certified Residential license. 3,000 hours of experience is required before obtaining the Certified General license.

This program is designed to meet the educational requirements of all four licensing levels of the Office of Real Estate Appraisers. Note: Licensed real estate brokers may satisfy 1,000 hours of the experience requirement.

Certificate of Proficiency

Program Requirements		Units
RE 100	Real Estate Principles	3
RE 110	Real Estate Appraisal	3
RE 111	Advanced Real Estate Appraisal	3
RE 112	Business Appraisal	3
TOTAL UNITS		12

Real Estate Broker License Preparation

Preparation requirements for the Real Estate Broker Examination:

1. One of the following:
Minimum of two years full-time licensed real estate salesperson experience within the last five years or the equivalent is required (part-time – 4 years)
- OR
Four year degree
- OR
Member of the bar of any state in the United States (which will also exempt you from the course requirements)
2. Complete the courses listed below:

A.A. Degree Major or Certificate of Achievement

Program Requirements		Units
RE 105	Real Estate Finance	3
RE 110	Real Estate Appraisal	3
RE 115	Real Estate Practice	3
RE 120	Legal Aspects of Real Estate	3
RE 130 or	Real Estate Economics	3
ACCT 103	Financial Accounting	4
Corequisite: ACCT 104 Acct Elec Spreadsheet Lab		1

Electives (Select *6 or 9 units)

***If ACCT 103, 104, and RE 130 are all three completed, only 6 units are required from the electives below:**

BUS 115	Business Law	3
BUS 116	Business Law	3
RE 100	Real Estate Principles	3
RE 111	Advanced Real Estate Appraisal	3
RE 140	Introduction to Property Management	3
RE 155	Escrow and the Title Procedures	3
RE 156	Advanced Escrow Procedures	3
TOTAL UNITS		24 - 26

Real Estate Salesperson License Preparation

A Real Estate Salesperson license is required of individuals who are to be employed as salespersons under the control and supervision of a licensed real estate broker. A license may be obtained by a person who does not immediately intend to be employed by a broker. However, no real estate

activity may be performed unless the licensee is in the employ of a licensed broker.

Minimum Requirements to qualify to take the Real Estate Salesperson examination:

1. Age – 18 years of age or older.
2. Residence – Must be a legal resident of California.
3. Honesty – License applicants must be honest and truthful.
4. Education – Applicants must provide evidence of successful completion of a three-unit course in Real Estate Principles. In addition, either with the examination or with the license application, or within 18 months after issuance of a license, the licensee must furnish official transcripts or certification with school seal confirming successful completion of a three-unit course in Real Estate Practice and one additional college level course listed below. Completion of the Real Estate Salesperson License Preparation Certificate satisfies the course requirements.

This program is designed to prepare the student for an entry-level position in the Real Estate sales field.

Certificate of Proficiency

Program Requirements		Units
RE 100	Real Estate Principles	3
RE 115	Real Estate Practice	3

Electives (Select 3-5 units)

ACCT 103 and	Financial Accounting	
ACCT 104	Accounting Electronic Spreadsheet Lab	5
BUS 115	Business Law	3
RE 105	Real Estate Finance	3
RE 110	Real Estate Appraisal	3
RE 120	Legal Aspects of Real Estate	3
RE 130	Real Estate Economics	3
RE 140	Introduction to Property Management	3
RE 155	Escrow and the Title Procedures	3
RE 156	Advanced Escrow Procedures	3
TOTAL UNITS		9-11

COURSE OFFERINGS

Courses numbered under 50 are non-degree courses.

Courses numbered under 100 are not intended for transfer credit.

RE 49 California Real Estate License Exam Preparation (.5)

½ hour lecture

Prerequisite: RE 100

Note: Credit/No credit grading; may be taken 2 times.

A specific review of materials included in the California Real Estate Licensing Exams (Salesperson and Broker). Testing techniques, stress management, and study skills will be covered.

RE 100 Real Estate Principles (3)

3 hours lecture

Note: Not open to students who have taken advanced real estate courses. This course may be offered on television.

Transfer acceptability: CSU

A real estate course covering the basic laws and principles of California real estate. Gives understanding, background, and terminology necessary for advanced study in specialized courses. Will be of assistance to those preparing for the real estate salesperson license examinations.

RE 105 Real Estate Finance (3)

3 hours lecture

Recommended preparation: A minimum grade of "C" in RE 100 or real estate license

Transfer acceptability: CSU

Analysis of real estate financing, including lending policies and problems in financing transactions in residential, apartment, commercial, special purpose properties, and land. Conventional and governmental programs emphasized.

RE 110 Real Estate Appraisal (3)

3 hours lecture

Recommended preparation: RE 100 or real estate license

Transfer acceptability: CSU

An introductory course covering the purposes of appraisals, the appraisal process, and the different approaches, methods, and techniques used to determine the value of various types of property. Emphasis will be on residential and single-unit property.

RE 111 Advanced Real Estate Appraisal (3)

3 hours lecture

Recommended preparation: RE 110 or 130

Transfer acceptability: CSU

Emphasis will be on the income approach to value. This course covers the appraisal of apartments, commercial/industrial properties, hotels, and business opportunities. Narrative report writing is required. All the continuing education requirements of the Office of Real Estate Appraisers will be covered, including 7 hours of the uniform standards of professional appraisal practice and state and federal laws and regulations.

RE 112 Business Appraisal (3)

3 hours lecture

Recommended preparation: RE 100, 111, or BUS 100

This course provides specialized training for licensed real estate salespersons, brokers, and appraisers in the methods and techniques used to evaluate small businesses. This course also includes fifteen hours of the Uniform Standards of Professional Appraisal Practice, required of students applying for the real estate residential, certified residential, or certified general appraisal exam.

RE 115 Real Estate Practice (3)

3 hours lecture

Recommended preparation: A minimum grade of "C" in RE 100 or real estate license

Transfer acceptability: CSU

Day-to-day operations in real estate roles and brokerage, including listing, prospecting, advertising, financing, sales techniques, escrow, and ethics. Applies toward State's educational requirements for the broker's examination.

RE 120 Legal Aspects of Real Estate (3)

3 hours lecture

Recommended preparation: A minimum grade of "C" in RE 100 or real estate license

Transfer acceptability: CSU

A study of California real estate law, including rights incident to property ownerships and management, agency, contracts, and application to real estate transfer, conveyancing, probate proceedings, trust deeds and foreclosure, as well as recent legislation governing real estate transactions. Applies toward educational requirement of broker's examination.

RE 130 Real Estate Economics (3)

3 hours lecture

Recommended preparation: A minimum grade of "C" in RE 100 or real estate license

Transfer acceptability: CSU

Deals with those trends and factors which affect the value of real estate; the nature and classification of land economics, the development of property, construction and sub-division, economic values and real estate evaluation; real estate cycles and business fluctuations, residential market trends, and real property trends.

RE 135 Real Estate Investments (3)

3 hours lecture

Transfer acceptability: CSU

Real estate investing for the layperson; basic factors in the investment field; selection of real estate investments; methods of analyzing and appraising real property; expanding tax benefits and consequences; real estate investment; modern methods of group purchases through various types of syndications, including limited partnerships and real estate investment trust; and case studies of actual or hypothetical investments. The State Department of Real Estate has given special approval for this course to be used in the

elective group for the Real Estate Salesperson and Broker State License.

RE 140 Introduction to Property Management (3)

3 hours lecture

Recommended preparation: A minimum grade of "C" in RE 100 or real estate license

Transfer acceptability: CSU

A practical approach to the principles and practices of managing income properties, including leasing, collections, and rent schedule; budget and purchasing, market economics; evictions; maintenance; taxation; and record keeping.

RE 145 Real Estate Exchanges (3)

3 hours lecture

Transfer acceptability: CSU

A fundamental course for real estate licensees who have had broad experience in residential, commercial, and urban land transactions. Theory of exchanges, building of estates, income tax advantages, and trends of the market. By means of case studies actual exchanges are analyzed, planned, and executed.

RE 150 Real Estate Income Taxation (2)

2 hours lecture

Recommended preparation: RE 100 or real estate license

Transfer acceptability: CSU

This course is designed to investigate real estate income taxation as it applies to the individual or business entity. It is intended that the student will derive a fuller understanding of both the use and the philosophy of tax law as it applies to real estate transactions. This course does not authorize students to advise clients regarding tax laws.

RE 155 Escrow and the Title Procedures (3)

3 hours lecture

Recommended preparation: RE 100 or real estate license

Transfer acceptability: CSU

Escrow procedures including the processing and close of sale and loan escrows, the familiarizations and drawing of documents, prorations, title searches, title reports, and other details pertinent to efficient escrow proceedings.

RE 156 Advanced Escrow Procedures (3)

3 hours lecture

Recommended preparation: RE 155

Transfer acceptability: CSU

Advanced course covering the more difficult and unusual types of escrow. Case problems on exchanges and condominiums.

RE 157 Escrow Problems (3)

3 hours lecture

Recommended preparation: RE 156

Transfer acceptability: CSU

Further study of the more unusual and difficult types of escrows with particular attention to those wherein conflict or dispute arises. Actual case problems are presented for evaluation and discussion. Some cases include compliance with conditions, agency relationships, wrongful delivery, conditional deposits, liability assignments, delivery, and escrow instructions.

RE 158 Current Trends in Escrow (3)

3 hours lecture

Recommended preparation: RE 157

Transfer acceptability: CSU

A refresher course for Escrow officers and supervisors covering current problems, legislation, and court cases. Open discussions and exchange of ideas will be expected of participants.

RE 197 Real Estate 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 Real Estate. See Class Schedule for specific topic offered. Course title will designate subject covered.

Recreation (REC)

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

Outdoor Leadership

Provides the skills necessary for work as a leader in outdoor activities for federal, state, municipal, and private recreational agencies.

A.A. Degree Major or Certificate of Achievement

Program Requirements			Units
GC/RGC	170	Screen Printing	3
HE	100	Health Education and Fitness Dynamics	3
REC	110	Community Recreation	3
PE	104/		
EME	100	Advanced First Aid	3
AJ	100	Introduction to Criminal Justice	3
CE	100	Cooperative Education	3,4
TOTAL UNITS			18 - 19

Recommended Elective: PE 230

Recreation Agency Leader

Provides the skills necessary for work as a leader in a municipal or private recreation program.

A.A. Degree Major or Certificate of Achievement

Required Courses			Units
GC/RGC	170	Screen Printing	3
HE	100	Health Education and Fitness Dynamics	3
PE	104/		
EME	100	Advanced First Aid	3
REC	110	Community Recreation	3
REC	120	Recreational Team Sports	2
AJ	100	Introduction to Criminal Justice	3
CE	100	Cooperative Education	1,2,3,4
TOTAL UNITS			18 - 21

Recommended Electives: MUS 197; PE 230

COURSE OFFERINGS

REC 110 Community Recreation (3)

3 hours lecture

Transfer acceptability: CSU

Scope of community recreation; basic philosophy of leisure time agencies and organizations for youth; program planning; playground practices; basic systems of organization; and policy formation.

REC 115 Recreational Leadership (3)

3 hours lecture

Transfer acceptability: CSU

Program planning and principles of group leadership; organized games and special events, playground management.

REC 120 Recreational Team Sports (2)

2 hours lecture

Transfer acceptability: CSU

The planning, organizing, of team sports designed to serve the interest of all people in a recreational setting. The course is designed to provide the methods and organization for group instruction in team sports including softball, soccer, touch football, volleyball, and basketball.

Religious Studies (RS)

See also American Indian Studies, Anthropology, History, Judaic Studies, Philosophy

Contact the Behavioral Sciences Department for further information, (760) 744-1150, ext. 2330

COURSE OFFERINGS

RS 101 World Religions (3)

3 hours lecture

Transfer acceptability: CSU; UC

A comparative study of the major figures from saviors to gurus, the practices and the teachings of the major religions of the world, Western and Eastern, ancient and modern.

RS 105 Ways of Understanding Religion (3)

3 hours lecture

Transfer acceptability: CSU; UC

An exploration of religious phenomena and the various approaches by which Religious Studies has attempted to understand them. Such phenomena as mysticism, use of scripture, ritual, religious ethics, concepts of human destiny, and the meaning of religion in the modern secular world will be examined. Examples will be drawn from Eastern and Western cultures in ancient, medieval, and modern times.

RS 110 Religion in America (3)

3 hours lecture

Transfer acceptability: CSU; UC

An introduction to the rich diversity of religious experience in the United States exploring the impact religion has had on our nation's history and culture. Native American, Asian, African-American, Jewish, Roman Catholic, Protestant, and sectarian movements will be discussed.

RS 120 Ethics of World Religions (3)

3 hours lecture

Transfer acceptability: CSU; UC

A study of how world religions historically developed their ethical positions and how these are expressed today. Religious attitudes about women's rights, gay rights, the environment, business, death and dying, abortion, race relations, and sexuality will be discussed.

RS 197 Religious 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 Religious Studies. See Class Schedule for specific topic offered. Course title will designate subject covered.

Secretarial

See Office Information Systems

Sign Language

See American Sign Language

Sociology (SOC)

See also American Indian Studies, Africana Studies, Chicano Studies

Contact the Behavioral Sciences Department for further information, (760) 744-1150, ext. 2329

COURSE OFFERINGS

SOC 100 Introduction to Sociology (3)

3 hours lecture

Transfer acceptability: CSU; UC; CAN SOC 2

A study of the principles and problems pertaining to group behavior, the relationships among human beings, the development and nature of institutions, and the structure of society.

SOC 105 Marriage, Family, and Intimate Relationships (3)

3 hours lecture

Note: Cross listed as PSYC 105

Transfer acceptability: CSU, UC

A study of the psychology and sociology of the family and intimate relationships. Emphasizes factors that enhance interpersonal relationships. Topics include love, marital choice, communication, conflict, and changing models of the family. Examines cross-cultural and historical factors that impact the family as a social institution and the impact of gender, race and ethnicity, social class, age, and sexual orientation on family organization.

SOC 110 Social Problems (3)

3 hours lecture

Transfer acceptability: CSU; UC; CAN SOC 4

Identification and analysis of contemporary social problems in the United States, with emphasis on the sociological factors involved. Topics include poverty and economic inequality; gender inequality; racial and ethnic inequality; problems in the family, government, education, and the economy; crime; drug use; warfare and violence, among others. A critical evaluation of the causes and solutions.

SOC 115 Introduction to Women's Studies (3)

3 hours lecture

Transfer acceptability: CSU; UC

The study of the position of women in American society from a sociological and cultural perspective. Topics to be studied include the theoretical approaches to studying gender; the impact of race and ethnicity, class, nationality, and sexual orientation on women's lives; cross-cultural variations in gender roles; the socialization of women; women's role in the major social institutions – the family, education, the political system, religion, the economy, and the mass media; violence against women; and feminism as a social movement.

SOC 120 Social Psychology (3)

3 hours lecture

Note: Cross listed as PSYC 120

Transfer acceptability: CSU; UC

Explores relationships between the behavior of individuals and the structure of society. Emphasizes the importance of language, roles, and the concept of the self in the socialization process.

SOC 125 Human Sexuality (3)

3 hours lecture

Note: Cross listed as PSYC 125

Transfer acceptability: CSU; UC

Survey of topics pertinent to an understanding of the development of human sexuality. Emphasis on biological, psychological, and cultural determinants of sexual behavior. Current sex norms and various aspects of interpersonal and individual sexual adjustment.

SOC 140 Introduction to Psychological and Social Services (3)

3 hours lecture-3 hours laboratory

Recommended preparation: PSYC 100 or SOC 100

Note: Cross listed as PSYC 140

Transfer acceptability: CSU

Community resources and techniques in the helping professions. Students will gain familiarity with community agencies and their functions and learn specific techniques useful for working in such settings. Included will be techniques of interviewing, assessment, intervention, and referral. Volunteer work in agencies is required.

SOC 145 Psychology and Sociology of Aging (3)

3 hours lecture

Note: Cross listed as PSYC 145

Transfer acceptability: CSU

A multi-disciplinary approach to the field of gerontology; historical, demographic, psychological, and sociological aspects of aging.

SOC 150 Introduction to Chemical Dependency (3)

3 hours lecture

Recommended preparation: PSYC 100, PSYC/SOC 140, and SOC 100 or 110

Note: Cross listed as PSYC 150

This basic course will provide a historical perspective on alcohol and other psychoactive drug abuse and its impact on the community. An interdisciplinary approach will be used. Topics will include definitions, sociocultural factors related to use and/or abuse, identification of issues and models of dependency and recovery, and analysis of the effectiveness of policies and programs.

SOC 155 The Physiology and Pharmacology of Psychoactive Drugs (3)

3 hours lecture

Recommended preparation: PSYC 100

Note: Cross listed as PSYC 155

This course will examine how psychoactive drugs affect the nervous system. Ways of classifying drugs will be identified including the processes of physical and psychological dependence, tolerance, withdrawal, and genetic predispositions. Temporary and permanent consequences of specific drugs will include: nutritional deficiencies, Korsakoff's syndrome, impact on sexual functioning, brain effects (including memory consequences), and behavioral consequences.

SOC 160 Chemical Dependency Treatment (3)

3 hours lecture

Recommended preparation: PSYC 100, PSYC/SOC 140, and SOC 100 or 110

Note: Cross listed as PSYC 160

This course will examine legal and ethical aspects of psychoactive drug use including employment issues, patients' rights, and confidentiality. There will be an in-depth study and evaluation of different models for intervention, recovery, and prevention with an emphasis on gender, community, and cultural issues.

SOC 197 Special Topics in Sociology (1,2,3)

1, 2, or 3 hours lecture

Note: May be taken 4 times

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

Current topics in sociology will be discussed in lecture or seminar formats. Issues in such areas as deviance, stratification, demography, gender roles, death and dying, new immigrant groups, and others will be analyzed in cultural context from various theoretical perspectives. Content will vary from semester to semester.

SOC 200 Race, Class, and Ethnic Groups in America (3)

3 hours lecture

Note: Cross listed as AMS/MCS 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.

SOC 205 Statistics for the Behavioral Sciences (3)

3 hours lecture

Prerequisite: A minimum grade of "C" in MATH 56 or 60 or eligibility determined through the math placement process

Note: Cross listed as PSYC 205

Transfer acceptability: CSU; UC – BIOL 215, MATH 120, and PSYC/SOC 205 combined: maximum credit, one course; CAN PSY 6

Quantitative methods as applied to behavioral science data. Frequency distributions, measures of central tendency, variability, theory of error, measures of significance, correlation, regression, and an introduction to analysis of variance. Also included is an introduction to the use of computers in statistics.

SOC 205L Data Analysis in Psychology and Sociology (1)
3 hours laboratory
Corequisite: PSYC/SOC 205
Note: Cross listed as PSYC 205L
Transfer acceptability: CSU; UC
 Use of the computer as a tool for calculating statistics and exploring data in Psychology and Sociology.

SOC 250 Group Leadership and Group Process (3)
hours lecture
Recommended preparation: PSYC/SOC 150, PSYC/SOC 155, and PSYC/SOC 160
Note: Cross listed as PSYC 250
 An introduction to the dynamics of group interaction with emphasis upon the individual's firsthand experience as the group studies itself under supervision. The factors involved in problems of communication, effective emotional responses, and personal growth will be highlighted. The emphasis will be upon group process as a means of changing behavior.

SOC 255 Chemical Dependency Case Management (3)
3 hours lecture
Recommended preparation: PSYC/SOC 150, PSYC/SOC 155, and PSYC/SOC 160
Note: Cross listed as PSYC 255
 Techniques used for beginning and crisis counseling, intake interviewing, and referral will be studied and practiced. Attention will be given to the appropriate strategies of intervention, the admitting process, and the recording of information as it pertains to alcohol and drug abuse clients/residents. Though experiential in format, participants will learn and practice skills in attentive listening and recognizing and responding to different levels of client communication. Students will demonstrate a knowledge of community resources and how to make appropriate referrals.

SOC 260 Chemical Dependency Family Counseling (3)
3 hours lecture
Recommended preparation: PSYC/SOC150, PSYC/SOC 155, and PSYC/SOC 160
Note: Cross listed as PSYC 260
 This course is designed to explore methods of assisting significant others (family, employer, etc.) to understand and to cope in dealing with the alcohol and drug abuse of alcoholics and addicts. The approach will be to analyze and examine the ideas and dynamics of those relationships and to develop practice strategies for the worker who counsels these persons. The approach will be experiential in format and students will participate in exercises that lead to the development of these skills.

SOC 296 Special Problems in Sociology (1,2,3)
1, 2, or 3 hours lecture
Note: May be taken 4 times
Transfer acceptability: CSU; UC – Credit determined by UC upon review of course syllabus.
 An individualized or group project in sociology of any nature. Extensive use of slides and other illustrative materials.

SOC 298 Directed Field Experience I (3)
3 hours lecture-5 hours laboratory
Prerequisite: PSYC/SOC 140 and acceptance into the Psychological and Social Services Certificate Program
Note: Cross listed as PSYC 298
Transfer acceptability: CSU
 Supervised field work in various community agencies in the psychological and social services areas. Agencies are selected with regard to student's area of specialization.

SOC 299 Directed Field Experience II (3)
3 hours lecture-8 hours laboratory
Recommended preparation: PSYC/SOC 250, PSYC/SOC 255, PSYC/SOC 260, and PSYC/SOC 298
Note: Cross listed as PSYC 299
 This course will include a lecture/seminar format and a supervised agency experience component which will prepare students to take certification examinations for alcohol/drug counselors.

Spanish (SPAN)

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.

Courses numbered under 100 are not intended for transfer credit.

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 Conversation courses for credit.)

SPAN 50 Beginning Conversation (3)
3 hours lecture

Note: May be taken 2 times
 This is the first course in the two-course series of Beginning Spanish conversation. Emphasis is on speaking and listening through the use of everyday vocabulary and communicative skills. Reading and writing skills will be developed from involvement with the spoken language. The course will also introduce students to the cultures of the Spanish-speaking world.

SPAN 51 Intermediate Conversation (3)
3 hours lecture

Prerequisite: SPAN 50
Note: May be taken 2 times
 This is the second course in the two-course series of Beginning Spanish conversation. Emphasis is on speaking and listening, using everyday vocabulary and communicative skills. Reading and writing skills will be developed from involvement with the spoken language. This course will also introduce students to the cultures of the Spanish-speaking world.

SPAN 80 Spanish Through Song (1)
1 hour lecture

A highly participatory course in which students of all levels develop and improve pronunciation skills, listening comprehension skills, vocabulary and certain basic grammar concepts by means of pedagogically chosen and enjoyable Spanish songs representing a variety of forms such as Salsa, Romantica, Cumbia, Mariachi, Popular Music and Latin Rock. Students become dynamically aware that songs are an essential expression of Hispanic culture.

SPAN 101 Spanish I (5)
5 hours lecture-1 hour laboratory

Transfer acceptability: CSU; UC – CAN SPAN 2; SPAN 101+ 102= CAN SPAN SEQ A
 This course is the first semester of Spanish. This elementary level course is a study of the Spanish language and Spanish-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 Spanish.

SPAN 101A Spanish IA (3)
3 hours lecture

Note: Covers the first half of SPAN 101
Transfer acceptability: CSU; UC – SPAN 101A and 101B combined: maximum credit, 5 units; UC – both courses must be taken for transfer credit to be given
 Spanish 101A is equivalent to the first half of Spanish 101. This elementary level course is a study of the Spanish language and Spanish-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 Spanish

SPAN 101B Spanish IB

3 hours lecture

Prerequisite: SPAN 101A or one year of high school Spanish**Note:** Covers the second half of SPAN 101**Transfer acceptability:** CSU; UC – SPAN 101A and 101B combined: maximum credit, 5 units; UC – both courses must be taken for transfer credit to be given

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

SPAN 102 Spanish II

5 hours lecture-1 hour laboratory

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

This course is the second semester of Spanish. This elementary level course is a study of the Spanish language and Spanish-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.

SPAN 102A Spanish IIA

3 hours lecture

Prerequisite: SPAN 101 or 101B or two years of high school Spanish**Note:** Covers the first half of SPAN 110**Transfer acceptability:** CSU; UC – SPAN 102A and 102B combined: maximum credit, 5 units; UC – both courses must be taken for transfer credit to be given

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

SPAN 102B Spanish IIB

3 hours lecture

Prerequisite: SPAN 102A or two years of high school Spanish**Note:** Covers the second half of SPAN 102**Transfer acceptability:** CSU; UC – SPAN 102A and 102B combined: maximum credit, 5 units; UC – both courses must be taken for transfer credit to be given

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

SPAN 201 Spanish III

5 hours lecture-1 hour laboratory

Prerequisite: SPAN 102 or 102B or three years of high school Spanish**Transfer acceptability:** CSU; UC – SPAN 201 and 240 combined: maximum credit, one course; CAN SPAN 8; SPAN 201+ 202=CAN SPAN SEQ B

This course is the third semester of Spanish. This intermediate level course is a study of the Spanish language and Spanish-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 Spanish. Course combines in-class instruction with self-paced study in the Foreign Language Laboratory. Class is largely conducted in Spanish.

SPAN 201A Spanish IIIA

3 hours lecture

Prerequisite: SPAN 102 or 102B or three years of high school Spanish**Note:** Covers the first half of SPAN 201; not open to students with credit for SPAN 201**Transfer acceptability:** CSU; UC – SPAN 201A and 201B combined: maximum credit, 5 units; UC – both courses must be taken for transfer credit to be given

First segment of first semester of intermediate Spanish (Spanish 201), stressing further grammatical development through oral and written communication and providing practice in readings of culturally

relevant authentic materials. Emphasizes effective written and spoken communication at the beginning intermediate level. Conducted largely in Spanish.

SPAN 201B Spanish IIIB

3 hours lecture

Prerequisite: SPAN 201A**Note:** Covers the second half of SPAN 201; not open to students with credit for SPAN 201**Transfer acceptability:** CSU; UC – SPAN 201A and 201B combined: maximum credit, 5 units; UC – both courses must be taken for transfer credit to be given

Spanish 201B is the second half of Spanish 201, and is a continuation of Spanish 201A. This intermediate level course is a study of the Spanish language and Spanish-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 Spanish. Class is largely conducted in Spanish.

SPAN 202 Spanish IV

5 hours lecture

Prerequisite: SPAN 201 or four years of high school Spanish**Transfer acceptability:** CSU; UC – SPAN 202 and 241 combined: maximum credit, one course; CAN SPAN 10; SPAN 201+ 202=CAN SPAN SEQ B

This course is the fourth semester of Spanish. This intermediate level course is a study of the Spanish language and of special topics on the culture of the Spanish-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 Spanish. Class is largely conducted in Spanish.

SPAN 215 Advanced Spanish

3 hours lecture

Prerequisite: SPAN 210**Transfer acceptability:** CSU; UC
Advanced grammar and composition.**SPAN 216 Advanced Spanish Conversation**

3 hours lecture

Prerequisite: SPAN 210**Transfer acceptability:** CSU; UC

Topics in Spanish language and culture with emphasis on improving fluency and building vocabulary.

SPAN 235 Intermediate Conversation and Writing

3 hours lecture

Prerequisite: SPAN 201**Note:** May be taken 2 times**Transfer acceptability:** CSU; UC

Topical discussions, oral and written themes, and practical vocabulary.

SPAN 240 Spanish for Native Speakers I

3 hours lecture

Prerequisite: Native speaker of Spanish**Transfer acceptability:** CSU; UC – SPAN 201 and 240 combined: maximum credit, one course

For the student who is a native speaker of Spanish and needs basic instruction in grammar, sentence structure, and paragraph development. No previous coursework in Spanish required. Provides the student with grammar and composition practice equivalent to that offered in SPAN 201.

SPAN 241 Spanish for Native Speakers II

3 hours lecture

Prerequisite: Native speaker of Spanish or SPAN 240**Transfer acceptability:** CSU; UC – SPAN 210 and 241 combined: maximum credit, one course

Continuation of SPAN 240 with emphasis on composition, vocabulary building, precision in word choice, spelling, and punctuation. Provides the student with grammar and composition practice equivalent to that offered in SPAN 210.

SPAN 295 Directed Study in Spanish

3, 6, or 9 hours laboratory

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

Transfer acceptability: CSU

Individual study in areas of Spanish language or culture. Designed for the student who has the initiative to work independently on a topic that is outside the scope of regularly scheduled classes.

SPAN 296 Special Studies in Spanish (1-3)

1 to 3 hours lecture

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

Transfer acceptability: CSU

Improve Spanish language competency and cultural awareness through individualized study, lectures, or class excursions. Undertaken during regular sessions, summer, or vacations.

Speech (SPCH)

Contact the Speech Communication/Forensics/ASL Department for further information, (760) 744-1150, ext. 2405

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

Speech Communication

Prepares the student for employment in programs where advanced speaking skills are necessary. Transfer students should consult the four-year college or university catalog for specific requirements or see a Palomar College counselor.

A.A. Degree Major

Program Requirements		Units
SPCH	100 Oral Communication	3
SPCH	105 Beginning Argumentation and Debate	3
SPCH	115 Interpersonal Communication	3
SPCH	120 Human Communication	3
SPCH/TA	125 Beginning Oral Interpretation	3
SPCH	131 Intercultural Communication	3
TOTAL UNITS		18

COURSE OFFERINGS

Courses numbered under 50 are non-degree courses.

Courses numbered under 100 are not intended for transfer credit.

SPCH 100 Oral Communication (3)

3 hours lecture

Transfer acceptability: CSU; UC; CAN SPCH 4

An introduction to the fundamental principles and techniques of public address. Students will frequently prepare and present talks of informative or persuasive intent. Emphasis will be placed on the collection, analysis, and organization of material appropriate to typical public address situations, as well as on the linguistic, vocal, and physical skills needed for effective delivery.

SPCH 105 Beginning Argumentation and Debate (3)

3 hours lecture

Prerequisite: A minimum grade of "C" in ENG 100

Transfer acceptability: CSU; UC; CAN SPCH 6

Argumentative theory and practice including burden of proof, logical analysis, research, types and uses of evidence, deductive and inductive reasoning, logical fallacies, written argumentative essay construction, refutation, rebuttal, and argument evaluation paradigms. Basic written communication skills are developed through composing, drafting, reviewing, and rewriting (1) analytical topic area essays, (2) affirmative and negative cases, and (3) written peer evaluation essays. Oral communication skills are developed through the agency of public debate. Critical perspectives on values and public policy, including examinations of diverse paradigms are emphasized.

SPCH 115 Interpersonal Communication (3)

3 hours lecture

Transfer acceptability: CSU

Introduction to the fundamental principles and terms of communication study in the interpersonal or face-to-face context. Analysis of communication patterns in developing, stable, and deteriorating relationships. Topics include communication rules and competence, perception and empathy, love, and family interaction.

SPCH 120 Human Communication (3)

3 hours lecture

Transfer acceptability: CSU; UC

A comprehensive introduction to the study of human communication processes including verbal and nonverbal modalities. Human abilities are compared to the communication systems of other species. Key definitions and concepts in communication theory are reviewed. Communication processes in personal, public, and mass-mediated contexts are analyzed.

SPCH 125 Beginning Oral Interpretation (3)

3 hours lecture

Note: Cross listed as TA 125

Transfer acceptability: CSU; UC

An introduction to the oral reading of prose, poetry, and drama in distinct and intertextual formats. Models of critical analysis will be applied to written literature and reading will be performed and evaluated by applying principles of effective delivery.

SPCH 131 Intercultural Communication (3)

3 hours lecture

Transfer acceptability: CSU

Introduction to the fundamental principles and terms of communication study in intercultural or cross-cultural contexts. Analysis of the opportunities and problems presented by national, ethnic, linguistic, and gender-based variation in verbal and nonverbal behaviors.

SPCH 145 Management of Speech Activities (1)

2 hours lecture/laboratory

Note: May be taken 4 times

Transfer acceptability: CSU

Planning, preparation, management, and supervision of speech tournaments and other interscholastic speech activities.

SPCH 150 Debate Research (1)

2 hours lecture/laboratory

Note: May be taken 4 times

Transfer acceptability: CSU

Advanced debate training including investigation and research of the national intercollegiate debate resolution.

SPCH 160 Practical Public Speaking (1)

2 hours lecture/laboratory

Note: May be taken 4 times

Transfer acceptability: CSU

Thorough individual preparation for effective oral communication in a variety of speech situations. This class will make up the college forensics team and the student speaker's bureau; students will be selected from classes in the speech curricula. Required of all students participating in intercollegiate competitive speech activities.

SPCH 165 Leadership Communication (3)

6 hours lecture/laboratory

Designed to increase participant's knowledge of the function of communication in leadership and group contexts. Students will explore the nature of human communication, one on one interpersonal interaction, small and large group communication, organizational communication, and public speaking. More specifically, discussion and activities will focus on the topics of perception, persuasion, listening, ethics, credibility, parliamentary procedure, and problem solving. *This course is designed primarily for participants in Associated Student Government and other student leadership positions at Palomar College. This is a TBA class and participants will be expected to attend local, state, and national conferences.*

SPCH 197A Topics in Speech Communication (.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 Speech Communication. See Class Schedule for specific topic offered. Course title will designate subject covered.

SPCH 290 Competitive Intercollegiate Forensics (1,2,3)

2, 4, or 6 hours lecture/laboratory

Note: May be taken 4 times

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

Advanced projects including individual research. Tutoring and performance for college classes and community including reader's theatre; informative, persuasive, entertaining, extemporaneous, and impromptu speaking; communication analysis, prose, poetry, duo-interpretation, programmed reading, and debate.

Surveying (SURV)

Contact Occupational & Noncredit Programs for further information, (760) 744-1150, ext. 2284

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

Surveying

Prepares students to be licensed surveyors in the field or in offices.

A.A. Degree Major or Certificate of Achievement

Program Requirements	Units
SURV 100 Plane Surveying	4
SURV 101 Advanced Plane Surveying	4
SURV 105 Survey Map Production	4
SURV 110 Control Surveying and Photogrammetry	4
SURV 115 Legal Principles	3
SURV 120 Boundary Control	3
SURV 125 Surveying Math and Drafting	3
SURV 130 Construction Surveying	4
MATH 115 Trigonometry	3
TOTAL UNITS	32

Recommended Elective: CE 100 (should be related to this major)

COURSE OFFERINGS

SURV 100 Plane Surveying (4)

3 hours lecture-3 hours laboratory

Prerequisite: MATH 115

Transfer acceptability: CSU; UC; SURV 100+101=CAN ENGR 10

Fundamentals of plane surveying, field practice, and calculations. Equipment and equipment use, horizontal, vertical, angular measurements; errors, traversing, leveling and stadia.

SURV 101 Advanced Plane Surveying (4)

3 hours lecture-3 hours laboratory

Prerequisite: SURV 100

Transfer acceptability: CSU; UC; SURV 100+101=CAN ENGR 10

Compute horizontal and vertical curves, tachometry, earthwork, error and adjustment of level nets, determine direction of lines and topographic surveys. The general procedure for United States Public Land Surveys and the State Plane Coordinates System.

SURV 105 Survey Map Production (4)

3 hours lecture-3 hours laboratory

Prerequisite: SURV 101 and DT 125

Transfer acceptability: CSU

Exposure to the special procedures and requirements unique to survey mapping. Fundamental survey drafting methods and types of maps will be stressed. Students will produce a variety of survey maps, both manually and by CAD systems.

SURV 110 Control Surveying and Photogrammetry (4)

3 hours lecture-3 hours laboratory

Prerequisite: SURV 101

Transfer acceptability: CSU

State plane coordinate systems, control surveying for municipal surveys, trilateration and adjustments, level nets and adjustments, and surveying for photogrammetry.

SURV 115 Legal Principles (3)

3 hours lecture

Prerequisite: SURV 101

Transfer acceptability: CSU

Topics involving the legal and professional aspects of surveying such as U.S. Public land surveys, property surveys, title search, and report laws affecting a surveyor. Topics in public relations, electronic computers, and calculators.

SURV 120 Boundary Control (3)

3 hours lecture

Prerequisite: SURV 101

Transfer acceptability: CSU

The resurveys or surveys based on the deed or record and the new divisions of land.

SURV 125 Surveying Math and Drafting (3)

3 hours lecture

Prerequisite: SURV 100

Transfer acceptability: CSU

Basic mathematics for surveyors as applied to bearing and azimuth, horizontal curves, vertical curves, traverse balancing and computations, areas, intersections, statistics and financial computations with emphasis on lettering techniques.

SURV 130 Construction Surveying (4)

3 hours lecture-3 hours laboratory

Prerequisite: SURV 101

Transfer acceptability: CSU

Construction surveys in the following areas: pipelines, tunnels, culverts, bridges, buildings, highways, and municipal surveys.

SURV 197 Surveying 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

Concentrated courses in surveying. Course title will designate subject covered.

Tagalog (TAG)

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.

TAG 101 Tagalog I (5)

5 hours lecture-1 hour laboratory

Transfer acceptability: CSU; UC

This course is the first semester of Tagalog. This elementary course is a study of pronunciation, essentials of grammar, reading, speaking, and writing. Relationship between language and culture.

TAG 102 Tagalog II (5)

5 hours lecture-1 hour laboratory

Prerequisite: TAG 101, or two years of high school Tagalog

Transfer acceptability: CSU; UC

This course is the second semester of Tagalog. This elementary level course is a study of the Tagalog language

and Tagalog-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.

TAG 201 Tagalog III (5)

5 hours lecture

Prerequisite: TAG 102 or three years of high school Tagalog

Transfer acceptability: CSU; UC

This course is the third semester of Tagalog. This intermediate level course is a study of grammar, review, composition, and continued oral practice. Appreciation of Tagalog culture through composition and oral practice assignments.

Theatre Arts (TA)

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.

PROGRAMS OF STUDY

Theatre Arts

Prepares the student for employment in programs where basic skills are necessary, especially children's theatre and community theatre. Transfer students should consult the four-year college or university catalog for specific requirements or see a Palomar College counselor.

A.A. Degree Major

Program Requirements	Units
TA 100 Introduction to the Theatre	3
TA/ENTT 105 Introduction to Technical Theatre	2.5
TA 109 Elementary Stage Make-Up	3
TA 111 Technical Theatre Production	.5
TA 115 Beginning Acting I: Fundamentals	3
TA 116 Beginning Acting II: Scene Study	3
TA 140 or History/Theatre thru 17th Century	
TA 141 History/Theatre/18th Century to the Present	3
TA 215 or Intermediate Acting I: Styles	
TA 216 or Intermediate Acting II: Character Development	
TA 217 Intensive Actor Training	3
Plus one of the following courses	
TA/ENTT 107 Special Effects of Light and Sound	3
TA/ENTT 108 Stagecraft/Scene Design	3
TA/SPCH 125 Beginning Oral Interpretation	3
TA 150 Dramatic Literature	3
TOTAL UNITS	24

Recommended Electives: TA 113, 184; DNCE/MUS/TA 173

Theatre Arts Emphasis In Acting

Provide actors with a foundation for lifelong development of acting experiences. Includes an introduction to the major 20th century approaches to actor training and basic concepts of character and script analysis.

A.A. Degree Major*

Program Requirements	Units
TA 100 Introduction to the Theatre	3
ENTT/TA 105 Introduction to Technical Theatre	2.5
TA 109 Elementary Stage Make-up	3
TA 115 Beginning Acting I: Fundamentals	3
TA 116 Beginning Acting II: Scene Study	3
TA 197D Stage Crew Workshop	3
ENG 205 Introduction to Literature	3

One course selected from the following classes:

TA 140	History of the Theatre From Ancient Greece Through The 17th Century	3
TA 141	History of the Theatre From the 18th Century To the Present	3

Two courses selected from the following classes of advanced acting:

TA 215	Intermediate Acting I: Styles	3
TA 216	Intermediate Acting II: Character Development	3
TA 217	Intensive Actor Training	3

One course selected from the following classes:

DNCE 100	Survey of Dance	3
DNCE 101	Survey of World Dance	3
DNCE 110	Modern Dance I	1.5
DNCE 115	Fundamentals of Ballet	1.5
DNCE 120	Jazz Technique I	1.5
DNCE 125	Theatre Dance I	1.5
DNCE 130	Tap Dance I	1.5

Once course selected from the following classes:

ENTT/TA 107	Special Effects of Light and Sound	3
ENTT/TA 108	Stagecraft/Scene Design	3

TOTAL UNITS 34-35.5

*Theatre Arts Emphasis in Acting A. A. Degree Major pending approval by Chancellor's Office at time of catalog publication.

Theatre - Technical

Provides training in basic technical theatre skills for career employment in technical production areas of drama, music, and telecommunications. Also provides training for employment in children's theatre, junior theatre, and community theatre.

Certificate of Achievement

Program Requirements	Units
TA 100 Introduction to the Theatre	3
TA/ENTT 105 Introduction to Technical Theatre	2.5
TA 106 Elementary Stage Costume	3
TA/ENTT 107 Special Effects of Light and Sound	3
TA/ENTT 108 Stagecraft/Scene Design	3
TA 109 Elementary Stage Make-Up	3
TA 111 Technical Theatre Production	.5
TA 115 or Beginning Acting I: Fundamentals	
TA 116 Beginning Acting II: Scene Study	3
TA 197D* Stage Crew Workshop	2-6
TA 197E Management of Theatre Activities	.5-3
Plus one of the following courses	
TA 140 History/Theatre thru 17th Century	3
TA 141 History/Theatre/18th Century to the Present	3
TA 170 Computer Aided Drafting for Theatre	3
TA 297 Experimental Topics in Theatre	1-3
TOTAL UNITS	24.5 - 33

Recommended Electives: DT 105; CFT 100; TA 197C

* TA 197D must be taken two times for a minimum of 2 units.

COURSE OFFERINGS

Courses numbered under 50 are non-degree courses.

Courses numbered under 100 are not intended for transfer credit.

TA 100 Introduction to the Theatre (3)

3 hours lecture

Transfer acceptability: CSU; UC

A survey of theory and practice in the contemporary theatre including its literary, critical and technical aspects, and their relationships to historical backgrounds.

TA 105 Introduction to Technical Theatre (2.5)

5 hours lecture/laboratory

Note: Cross listed as ENT 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.

TA 106 Elementary Stage Costume (3)

2 hours lecture-4 hours laboratory

Prerequisite: ENTT/TA 105

Transfer acceptability: CSU; UC

Basic theories, techniques, and procedures of costume production for stage, film, and television. Practical training in college productions.

TA 107 Special Effects of Light and Sound (3)

2 hours lecture-4 hours laboratory

Prerequisite: ENTT/TA 105

Note: Cross listed as ENTT 107

Transfer acceptability: CSU; UC

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

TA 108 Stagecraft/Scene Design (3)

2 hours lecture-4 hours laboratory

Prerequisite: ENTT/TA 105

Note: Cross listed as ENTT 108

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.

TA 109 Elementary Stage Make-Up (3)

2 hours lecture-4 hours laboratory

Prerequisite: ENTT/TA 105

Transfer acceptability: CSU; UC

Basic theories, techniques, and procedures of make-up production for stage, film, and television. Practical training in college productions.

TA 111 Technical Theatre Production (.5)

1½ hours lecture/laboratory

Prerequisite: ENTT/TA 105

Corequisite: TA 106, ENTT/TA107, ENTT/TA 108, or TA 109

Note: May be taken 4 times

Transfer acceptability: CSU; UC

Techniques and procedures for all phases of technical theatre production with an emphasis on production organization. Practical training through college production.

TA 113 Theatre and Comedy Improvisation (3)

3 hours lecture

Note: May be taken 3 times

Transfer acceptability: CSU

Practice and analysis of improvisational theatre and expansion of student's confidence and creative abilities. Development of a foundation for further work in the theatre.

TA 115 Beginning Acting I: Fundamentals (3)

3 hours lecture

Transfer acceptability: CSU; UC

In a workshop environment, the student will learn the basic tools and terminology of acting. The student will apply this knowledge and experience to the performance of short scenes.

TA 116 Beginning Acting II: Scene Study (3)

Three hours lecture (3)

Prerequisite: TA 115

Transfer acceptability: CSU; UC

Designed to improve the actor's skills for performing scenes and monologues with truth and power. Actors will improve their ability to pursue the character's needs and objectives, to be vulnerable to their partners' words and actions and to create with a range of emotion. Actors in this class will continue to develop their vocal and physical technique.

TA 122 World View of the Short Play (3)

3 hours lecture

Prerequisite: TA 100 or 115

Transfer acceptability: CSU; UC

An exploration of cultural and social diversity through intensive investigation of the short play. Students will study the works of

several artists with varied views and backgrounds, including segments on African, African-American, Asian, Hispanic, and gay and lesbian theatre. Each student will also participate in the acting, directing and/or technical aspects of several short works, culminating in the performance of the "Short Play Festival."

TA 123 Arts Across the Curriculum (3)

3 hours lecture

Note: Cross listed as: ART/DNCE/MUS 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.

TA 125 Beginning Oral Interpretation (3)

3 hours lecture

Note: Cross listed as SPCH 125

Transfer acceptability: CSU; UC

An introduction to the oral reading of prose, poetry and drama in distinct and intertextual formats. Models of critical analysis will be applied to written literature and reading will be performed and evaluated by applying principles of effective delivery.

TA 140 History of the Theatre From Ancient Greece Through the 17th Century (3)

3 hours lecture

Transfer acceptability: CSU; UC

A survey of the influence of different cultures, traditions, and technologies on the development of the theatre as a social institution from Ancient Greece through the 17th Century.

TA 141 History of the Theatre From the 18th Century to the Present (3)

3 hours lecture

Transfer acceptability: CSU; UC

A survey of the influence of different cultures, traditions, and technologies on the development of the theatre as a social institution from the 18th Century to the present.

TA 155 Beginning Playwriting (3)

3 hours lecture

Transfer acceptability: CSU

Study and analysis of form, style, and structure in dramatic literature. Students will write at least two one-act plays for critical analysis. Selected student work will be given studio production.

TA 160 Beginning Stage Direction (3)

3 hours lecture

Transfer acceptability: CSU; UC

Training in the principles, procedures, and methods of stage direction. Students will serve as assistant directors on college productions and will also direct scenes for acting classes and studio productions.

TA 170 Computer Aided Drafting for Theatre (3)

6 hours lecture/laboratory

Prerequisite: TA/ENTT 108

Note: May be taken 2 times

Transfer acceptability: CSU

Basic introduction to computer aided drafting using AutoCAD software and IBM compatible or Macintosh computers. Hands-on experience with AutoCAD to include basic mechanical drafting terminology and techniques. An introduction to user specific third party software as related to drafting and designing of scenery for college productions.

TA 173 Musical Theatre Scenes (1)

3 hours laboratory

Note: Cross listed as DNCE/MUS 173

Transfer acceptability: CSU

Rehearsal and performance of solo and group scenes from Broadway musicals dating from the 1930's to the present.

TA 182 Introduction to Arts Management (3)

9 hours laboratory

Note: Cross listed as AMS/ART/DNCE/MUS 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.

TA 183 Internship in Arts Management (3)

9 hours laboratory

Prerequisite: AMS/ART/DANCE or MUS 182

Note: Cross listed as AMS/ART/DNCE/MUS 183

Transfer acceptability: CSU

Practical experience in arts management in the visual and performing arts.

TA 184 Creative Theatre Ensemble (3)

3 hours lecture

Note: May be taken 4 times

Transfer acceptability: CSU; UC

Students (actors, designers, directors, musicians, visual artists, etc.) will work together as an ensemble to create theater performances that rely on discipline, skill, imagination, and artistic courage.

TA 197A Summer Theatre Workshop (3)

6 hours lecture/laboratory

Note: May be taken 4 times

Transfer acceptability: CSU; UC

A lecture/laboratory course designed to give students guidance and direction in a variety of practical experiences in the theatre (including acting, lighting, scenery, costumes, and stage management) through productions of major works for public audiences.

TA 197C Rehearsal and Performance (.5-3)

1½ to 9 hours laboratory

Note: May be taken 4 times

Transfer acceptability: CSU; UC

Participation in college dramatic and musical productions as a member of the stage crew or house staff. At least one unit of this course is required of all theatre arts majors.

TA 197D Stage Crew Workshop (.5-3)

1½ to 9 hours laboratory

Prerequisite: Completion of, or concurrent enrollment in, TA 105 or 111

Note: At least one unit of this course is required of all theatre arts majors; may be taken 4 times

Transfer acceptability: CSU; UC

Participation in college dramatic and musical productions as a member of the stage crew or house staff.

TA 197E Management of Theatre Activities (.5-3)

1½ to 9 hours laboratory

Note: May be taken 4 times

Transfer acceptability: CSU

The principles of organization, operation, and planning for theatre management including programming, ticket sales, box office records, and promotional news release writing. Practical use applied to theatre productions.

TA 197F Theatre 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 theatre. See Class Schedule for specific topic offered. Course title will designate subject covered.

TA 215 Intermediate Acting I: Styles (3)

3 hours lecture

Prerequisite: TA 116

Note: May be taken 2 times

Transfer acceptability: CSU; UC

This course emphasizes the application of fundamental acting skills to specific styles. The actors will learn how to accomplish the demands of different styles from Shakespeare to Theatre of the Absurd.

TA 216 Intermediate Acting II: Character Development (3)

3 hours lecture

Prerequisite: TA 116

Note: May be taken 2 times

Transfer acceptability: CSU; UC

Several approaches to the task of creating a character will be offered. Physical, vocal, psychological, and emotional aspects of character will be developed in depth.

TA 217 Intensive Actor Training (3)

3 hours lecture

Prerequisite: TA 116 and audition

Transfer acceptability: CSU

The application of rigorous actor training techniques to develop the actor's ability to create compelling performances. The coursework will integrate physical, vocal and imagination training with psychological work, text analysis and ensemble training.

TA 297 Experimental Topics in Theatre (1,2,3)

3, 6, or 9 hours laboratory

Prerequisite: Previous theatre experience

Note: May be taken 4 times

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

Designed for students with particular interest in advanced projects, including individual research. Tutoring and performance for college classes and community.

Wastewater Technology Education (WWT)

Contact Occupational & Noncredit Programs for further information, (760) 744-1150, ext. 2284

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

Wastewater Technology Education

Specifically designed for individuals employed by or seeking employment in water districts in San Diego County.

A.A. Degree Major or Certificate of Achievement

Program Requirements		Units
WWT 100	Treatment Plant Operations	3
WWT/WTE 110	Waterworks Mathematics	3
WWT/WTE 120	Instrumentation and Controls	3
WWT/WTE/		
PWM 125	Supervision	3
WWT 150	Collection Systems Operator	3
WWT 155	Treatment Process Control	3
WWT/WTE 215	Motors/Pumps/Oper/Maintenance	3
WWT 220	Discharge Water Monitoring	3
Electives (Select 6-7 units)		
WWT/WTE 135	Backflow Prevention	3
WWT/WTE 138	Cross Connection Specialist	3
WWT 197	Wastewater Tech Education Topics	.5-4
CE 100*	Cooperative Education	3,4
TOTAL UNITS		30 – 31

*Cooperative Education must be related to this major.

COURSE OFFERINGS

Courses numbered under 50 are non-degree courses.

Courses numbered under 100 are not intended for transfer credit.

WWT 45 Vocational Math Skills for WWT/WTE (3)

3 hours lecture

Note: Cross listed as WTE 45

Introduction to the basic mathematic skills used in water and wastewater calculations. Particular interest is given to industry-relevant problems and examples.

WWT 100 Treatment Plant Operations (3)*3 hours lecture***Recommended preparation:** WWT/WTE 45**Note:** May be taken 2 times**Transfer acceptability:** CSU

An introductory wastewater treatment plant operations course. Topics covered include: the various origins and characteristics of wastewater; an overview of wastewater collections systems; preliminary treatment; primary treatment; fixed film secondary biological treatment processes; treatment ponds and disinfection. Emphasis is given to the role of the operator and preparation for solving practical problems and problems typical of those found in Operator Certification examinations.

WWT 110 Waterworks Mathematics (3)*3 hours lecture***Recommended preparation:** WWT/WTE 45**Note:** Cross listed as WTE 110

Provides instruction in entry level to intermediate level mathematical calculations used in the operation and evaluation of conventional water and wastewater treatment processes. The course content has been developed to meet training requirements for entry to intermediate level certification (Grade I - III) for water treatment plant operators. Also, it will cover wastewater collection, treatment and disposal. Material will parallel some of the problems found on State Certification examination.

WWT 120 Instrumentation and Controls (3)*3 hours lecture***Prerequisite:** WTE/WWT 110**Note:** Cross listed as WTE 120**Transfer acceptability:** CSU

Introduction to basic electrical theory. Applications and uses of water and wastewater control systems including switches, relays, alarms, motors, instrumentation and telemetering.

WWT 125 Supervision (3)*3 hours lecture***Note:** Cross listed as WTE/PWM 125**Transfer acceptability:** CSU

Managerial aspects of public utilities including organization, decision making, coordination, communication, and public relations. Personnel management including recruiting, training, evaluation, discipline, promotion, morale, and grievances. Safety programs and encouraging safe conditions, actions and attitudes.

WWT 135 Backflow Prevention (3)*2½ hours lecture-1½ hours laboratory***Note:** Cross listed as WTE 135; may be taken 4 times**Transfer acceptability:** CSU

Concentrated training in recognition and abatement of cross-connections in water supply and plumbing systems. Hands-on backflow prevention device testing procedures for certification.

WWT 138 Cross Connection Specialist (3)*3 hours lecture***Recommended preparation:** WTE/WWT 135**Note:** Cross listed as WTE 138

The study of the various levels of administrative and technical procedures necessary to operate a cross connection control program. Students will obtain the knowledge to become certified as a "Cross Connection Control Specialist" under the provisions set forth by American Water Works Association.

WWT 150 Collection Systems Operator (3)*3 hours lecture***Transfer acceptability:** CSU

Wastewater collection systems and collection system equipment, pipeline cleaning and maintenance, system design, safety procedures, inspecting and testing procedures used in collections systems.

WWT 155 Treatment Process Control (3)*3 hours lecture***Recommended preparation:** WWT 110**Transfer acceptability:** CSU

A wastewater treatment and disposal course with an emphasis on control of these processes. Topics covered include: the activated sludge secondary treatment process and its variations; sludge digestion, treatment and disposal; safety and housekeeping;

maintenance and an overview of effluent disposal, tertiary treatment and reclamation. Emphasis is also given to the role of the operator and provides preparation for solving process control calculations and problems typical of those found in Operator Certification examinations.

WWT 197 Wastewater Technology Education 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 Wastewater Technology Education. See Class Schedule for specific topic offered. Course title will designate subject covered.

WWT 215 Motors and Pumps, Operation and Maintenance (3)*3 hours lecture***Recommended preparation:** WTE/WWT 110**Note:** Cross listed as WTE 215**Transfer acceptability:** CSU

Identification of problems encountered, causes of problems, corrective solutions, and repairs in the operation of pumps and motors. Implementation of maintenance programs including scheduling and recordkeeping.

WWT 220 Discharge Water Monitoring (3)*2½ hours lecture, 1½ hours laboratory***Recommended preparation:** WTE/WWT 110

Study of basic laboratory methods, sampling and analysis procedures, chemistry concepts, and regulatory requirements in order to monitor wastewater for compliance and treatment plant process control.

Water Technology Education (WTE)

Contact Occupational & Noncredit Programs for further information, (760) 744-1150, ext. 2284

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

Water Technology Education

Specifically designed for individuals employed by or seeking employment in water districts in San Diego County.

A.A. Degree Major or Certificate of Achievement

Program Requirements		Units
WTE 100	Waterworks Distribution	3
WTE 105	Water Treatment Plant Operation I	3
WTE/		
WWT 110	Waterworks Mathematics	3
WTE/		
WWT 120	Instrumentation and Controls	3
WTE/WWT/		
PWM 125	Supervision	3
WTE 150	Water Quality Monitoring	3
WTE/		
WWT 215	Motors/Pumps/Oper/Maintenance	3
Electives (Select 9-10 units)		
WTE/		
WWT 135	Backflow Prevention	3
WTE/		
WWT 138	Cross Connection Specialist	3
WTE 197	Water Technology Education Topics	.5-4

WTE 205	Waterworks Distribution II	3
WTE 210	Water Treatment Plant Operation II	3
CE 100*	Cooperative Education	3-4
TOTAL UNITS		30-31

* Cooperative Education must be related to this major.

COURSE OFFERINGS

Courses numbered under 50 are non-degree courses.

Courses numbered under 100 are not intended for transfer credit.

WTE 45 Vocational Math Skills for WWT/WTE (3)

3 hours lecture

Note: Cross listed as WWT 45

Introduction to the basic mathematic skills used in water and wastewater calculations. Particular interest is given to industry-relevant problems and examples.

WTE 100 Waterworks Distribution (3)

3 hours lecture

Recommended preparation: WTE/WWT 45

Transfer acceptability: CSU

Water utility system operations and maintenance. An introduction to the principles of pressure pipe systems and the hydraulics involved in their operation. Design, installation, operation, and maintenance of basic elements of water systems including pipes, pumps, valves, meters, and related hydraulic units. Operations and maintenance safety considerations emphasized. This course prepares students for the "American Water Works Association" Grade I and Grade II exams.

WTE 105 Water Treatment Plant Operation I (3)

3 hours lecture

Recommended preparation: WTE/WWT 45

Note: May be taken 2 times

Transfer acceptability: CSU

Practical water quality control and treatment with emphasis given to sources of and quality characteristics of natural water, chemistry, public health protection, sanitary practices, and hydraulic principles. Particular attention will be given to basic water treatment plant process and operation. Will be helpful to those preparing for the Grade I and Grade II examination.

WTE 110 Waterworks Mathematics (3)

3 hours lecture

Recommended preparation: WTE/WWT 45

Note: Cross listed as WWT 110

Provides instruction in entry level to intermediate level mathematical calculations used in the operation and evaluation of conventional water and wastewater treatment processes. The course content has been developed to meet training requirements for entry to intermediate level certification (Grade I - III) for water treatment plant operators. Also, it will cover wastewater collection, treatment and disposal. Material will parallel some of the problems found on State Certification examination.

WTE 120 Instrumentation and Controls (3)

3 hours lecture

Prerequisite: WTE/WWT 110

Note: Cross listed as WWT 120

Transfer acceptability: CSU

Introduction to basic electrical theory. Applications and uses of water and wastewater control systems including switches, relays, alarms, motors, instrumentation and telemetering.

WTE 125 Supervision (3)

3 hours lecture

Note: Cross listed as WWT/PWM 125

Transfer acceptability: CSU

Managerial aspects of public utilities including organization, decision-making, coordination, communication, and public relations. Personnel management including recruiting, training, evaluation, discipline, promotion, morale, and grievances. Safety programs and encouraging safe conditions, actions and attitudes.

WTE 135 Backflow Prevention (3)

2½ hours lecture-1½ hours laboratory

Note: Cross listed as WWT 135; may be taken 4 times

Transfer acceptability: CSU

Concentrated training in recognition and abatement of cross-connections in water supply and plumbing systems. Hands-on backflow prevention device testing procedures for certification.

WTE 138 Cross Connection Specialist (3)

3 hours lecture

Recommended preparation: WTE/WWT 135

Note: Cross listed as WWT 138

The study of the various levels of administrative and technical procedures necessary to operate a cross connection control program. Students will obtain the knowledge to become certified as a "Cross Connection Control Specialist" under the provisions set forth by American Water Works Association.

WTE 150 Water Quality Monitoring (3)

2 ½ hours lecture-1 ½ hours laboratory

Recommended preparation: WWT/WTE 110

Regulatory requirements, proper sampling procedures, basic laboratory methods in order to monitor water quality for regulatory compliance or treatment plant operations.

WTE 197 Water Technology Education 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 Water Technology Education. See Class Schedule for specific topic offered. Course title will designate subject covered.

WTE 205 Waterworks Distribution II (3)

3 hours lecture

Recommended preparation: WTE 100 and 110

Transfer acceptability: CSU

Intermediate and advanced instruction in the field of water production, types of reservoirs, water lines, pumps, valves, and related appurtenances. Studies design, proper operation, and facilities repair of a public water system. Provides instruction in methods of record keeping and administrative responsibilities related to water systems. This course prepares students for the California Department of Health Services, Water Distribution Operator certification exams at levels D-3, D-4, and D-5 and the "American Water Works Association" certification exams for Grades II, III, and IV.

WTE 210 Water Treatment Plant Operation II (3)

3 hours lecture

Prerequisite: WTE 105 and 110

Transfer acceptability: CSU

Advanced water quality control and treatment with emphasis given to state regulations, EPA regulations, advanced mathematics and chemistry. Particular attention will be given to in-depth examination of treatment plant processes and the enforcement of the Surface Water Treatment Rule, Total Coliform Rule, Interim Enhanced Surface Water Treatment Rule, Long Term 1 Enhanced Surface Water Treatment Rule, Long Term 2 Enhanced Surface Water Treatment Rule, and Disinfection/Disinfection by Product Rule. This course will be helpful to those preparing for Grade III and IV examinations.

WTE 215 Motors and Pumps, Operation and Maintenance (3)

3 hours lecture

Recommended preparation: WTE/WWT 110

Note: Cross listed as WWT 215

Transfer acceptability: CSU

Identification of problems encountered, causes of problems, corrective solutions, and repairs in the operation of pumps and motors. Implementation of maintenance programs including scheduling and recordkeeping.

Welding (WELD)

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

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

Entry-Level Gas Metal Arc/Flux Cored Arc Welding

Provides the skills necessary for entry-level employment as a gas metal arc welder/flux cored arc welder.

Certificate of Proficiency

Program Requirements		Units
IT 100	Technical Mathematics	3
WELD 100	Welding I	3
WELD 120	Gas Metal Arc and Flux Cored Arc Welding	3
WELD 135	Print Reading for Welders	3
WELD 160	Metal Layout for Fabrication	3
TOTAL UNITS		15

Entry-Level Gas Tungsten Arc Welding

Provides the skills necessary for entry-level employment as a gas tungsten arc welder.

Certificate of Proficiency

Program Requirements		Units
IT 100	Technical Mathematics	3
WELD 100	Welding I	3
WELD 115	Gas Tungsten Arc Welding	3
WELD 135	Print Reading for Welders	3
WELD 160	Metal Layout for Fabrication	3
TOTAL UNITS		15

Entry-Level Shielded Metal Arc Welding

Provides the skills necessary for entry-level employment as a shielded metal arc welder.

Certificate of Proficiency

Program Requirements		Units
IT 100	Technical Mathematics	3
WELD 100	Welding I	3
WELD 135	Print Reading for Welders	3
WELD 160	Metal Layout for Fabrication	3
TOTAL UNITS		12

Welding Technology

Provides training for a career in the field of welding. Following the study of basic welding processes, the student may elect to concentrate in one or more of the basic welding processes and to prepare for the industrial certification test.

A.A. Degree Major or Certificate of Achievement

Program Requirements		Units
WELD 100	Welding I	3
WELD 110	Shielded Metal Arc Welding	3
WELD 115	Gas Tungsten Arc Welding	3
WELD 120	Gas Metal Arc and Flux Cored Arc Welding	3
WELD 160	Metal Layout for Fabrication	3
WELD 196	Special Problems in Welding	1,2,3
WELD 135	Print Reading for Welders	3
CE 100	Cooperative Education	1,2,3,4
IT 100	Technical Mathematics	3
TOTAL UNITS		23 - 28

COURSE OFFERINGS

Courses numbered under 50 are non-degree courses.

Courses numbered under 100 are not intended for transfer credit.

WELD 10L Shielded Metal Arc Welding Laboratory(3)

6 hours lecture/laboratory

Note: May be taken 4 times

Operation of arc welding machines with various electrodes in all positions of welding.

WELD 15L Gas Tungsten Arc Welding Laboratory (3)

6 hours lecture/laboratory

Note: May be taken 4 times

Operation of Gas Tungsten Arc Welding machines on carbon steel, stainless steel, and aluminum.

WELD 20L Semiautomatic Arc Welding Laboratory(3)

6 hours lecture/laboratory

Note: May be taken 4 times

Operation of Gas Metal Arc and Flux Cored Arc Welding machines on carbon steel.

WELD 100 Welding I (3)

2 hours lecture-4 hours laboratory

Note: May be taken 2 times

Transfer acceptability: CSU

Introduction to safe practices, setup, and operation of oxyfuel cutting and brazing, shielded metal arc welding, gas tungsten arc welding, flux core arc welding, and gas metal arc welding.

WELD 110 Shielded Metal Arc Welding (3)

2 hours lecture-4 hours laboratory

Note: May be taken 4 times

Transfer acceptability: CSU

Welding steel sheet metal, plate, tubing, and pipe. Carbon arc gouging on construction type steels.

WELD 115 Gas Tungsten Arc Welding (3)

6 hours lecture/laboratory

Note: May be taken 4 times

Transfer acceptability: CSU

Safe setup, operation, and maintenance of GTAW welding equipment. Welding stainless steel, carbon steel, and aluminum in the flat and horizontal position.

WELD 116 Advanced Gas Tungsten Arc Welding (3)

6 hours lecture/laboratory

Note: May be taken 4 times

Transfer acceptability: CSU

Safe setup, operation and maintenance of GTAW welding equipment. Welding stainless steel, carbon steel, aluminum, and other exotic metals in all positions according to building codes, military specifications, and aerospace standards.

WELD 120 Gas Metal Arc and Flux Cored Arc Welding (3)

2 hours lecture-4 hours laboratory

Note: May be taken 4 times

Transfer acceptability: CSU

Gas metal arc welding steel and aluminum sheet metal, plate and pipe with short arc and spray arc technique. Flux cored arc welding steel plate in flat, horizontal, and vertical positions.

WELD 135 Print Reading for Welders (3)

3 hours lecture

Line interpretation, sketching, bill of materials, structural shapes, welding symbols, joint types, weld types, and metric conversions.

2 hours lecture-4 hours laboratory

Prerequisite: WELD 101

Note: May be taken 4 times

This course is designed to train the students to be familiar with the provisions of the various welding standards and codes. Supervised training is provided so that students will be able to qualify for certification on any code or standard.

WELD 160 Metal Layout for Fabrication (3)

6 hours lecture/laboratory

Note: May be taken 4 times

This course provides students with knowledge of basic layout, fitup, fabrication, safe operation of shop equipment. Parallel line, radial line, and triangulation layout will be taught. Students will work from drawings or sketches to prepare, form, or cut multiple parts for assembly.

WELD 196 Special Problems in Welding (1,2,3)

3, 6 or 9 hours laboratory

Prerequisite: Completion of, or concurrent enrollment in, WELD 100**Note:** May be taken 4 times

This course is designed to aid the student in the enrichment of the area of concentration in welding and is of a research nature. Content to be determined by the need of the student under signed contract with the instructor.

Women's Studies

Contact the Behavioral Sciences Department for further information, (760) 744-1150, ext. 2330

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

Women's Studies

This major offers the student an opportunity to study women and their contributions from a female perspective. It also provides intensive, interdisciplinary lower-division preparation necessary for pursuing advanced coursework in Women's Studies. Transfer students should consult the four-year college or university catalog for specific requirements.

A.A. Degree Major

Program Requirements		Units
SOC 115	Introduction to Women's Studies	3
Electives (Select a minimum of 15 units)		
AIS 165	Native Women in the Americas	3
COMM 105	Human Values in the Mass Media	3
ENG 280	Women and Literature	3
PSYC/SOC 145	Psychology and Sociology of Aging	3
HIST 130	Women in United States History	3
PSYC 130	Psychology of Women	3
PSYC/SOC 125	Human Sexuality	3
TOTAL UNITS		18

Recommended Electives: ENG 100 and 202 with emphasis in Women's Studies issues.

Zoology (ZOO)

Contact the Life Sciences Department for further information, (760) 744-1150, ext. 2275

COURSE OFFERINGS

ZOO 100 General Zoology (4)

3 hours lecture-3 hours laboratory

Note: Not open to students with prior credit in ZOO 101 or 101L**Transfer acceptability:** CSU; UC – No credit if taken after ZOO 101/101L; CAN BIOL 4

Principles of animal life and body organization. Structural and functional adaptations of major groups of the animal kingdom from protozoans through mammals. *This is a general education course intended for non-science majors.*

ZOO 101 Animal Kingdom (3)

3 hours lecture

Note: Not open to students with prior credit in ZOO 100**Transfer acceptability:** CSU; UC – No credit if taken after ZOO 100

Structural and functional adaptations of major groups of the animal kingdom from protozoans through mammals. ZOO 101L laboratory optional.

ZOO 101L Animal Kingdom Laboratory (1)

3 hours laboratory

Prerequisite: Completion of, or concurrent enrollment in, ZOO 101**Note:** Not open to students with prior credit in ZOO 100**Transfer acceptability:** CSU; UC – No credit for ZOO 101/101L if taken after 100

Investigations upon living and preserved specimens representative of the major groups of the animal kingdom. *This is a general education course intended for non-science majors.*

ZOO 115 Natural History of Animal Life (4)

3 hours lecture-3 hours laboratory

Note: Not open to students with prior credit in ZOO 116 or 116L**Transfer acceptability:** CSU; UC – ZOO 115, 116/116L combined: maximum credit, 4 units

Consideration of the natural history, adaptations, ecology, behavior, and distribution of animals with reference to major groups of both vertebrates and invertebrates. Weekend field trips are required.

ZOO 116 Natural History of Animal Life (Lecture) (3)

3 hours lecture

Note: Not open to students with prior credit in ZOO 115**Transfer acceptability:** CSU; UC – ZOO 115, 116/116L combined: maximum credit, 4 units

Consideration of the natural history, adaptations, ecology, behavior, and distribution of animals with reference to major groups of both invertebrates and vertebrates

ZOO 116L Natural History of Animal Life (Laboratory) (1)

3 hours laboratory

Prerequisite: Completion of, or concurrent enrollment in, ZOO 116**Note:** Not open to students with prior credit in ZOO 115**Transfer acceptability:** CSU; UC – ZOO 115, 116/116L combined: maximum credit, 4 units

The radiative adaptation of representative animals to various habitats and modes of life; field observation of major fauna of littoral, chaparral, desert, and mountain environments. Weekend field trips are required.

ZOO 120 Animal Behavior (3)

3 hours lecture

Transfer acceptability: CSU; UC

Biological basis of behavior including behavior genetics, operation of evolutionary processes on species-typical behaviors, behavioral ontogeny, functional organization of nervous systems, animal senses, motivation including hormonal effects on drive, and biorhythms; behavioral ecology including social behavior and social living, reproductive behaviors, homing and migration, antipredatory defenses, feeding strategies, and communication.

ZOO 135 Marine Mammals: Biology and Ecology (3)

3 hours lecture

Note: Cross listed as BIOL 135**Transfer acceptability:** CSU; UC

Basic biology and ecology of marine mammals. Special emphasis on behavior, adaptations, and conservation.

ZOO 145 Introduction to Anatomy and Physiology (3)

3 hours lecture

Note: Not open to students with prior credit in ZOO 200, 203 and 205**Transfer acceptability:** CSU; UC – ZOO 145/145L and BIOL 106/106L or BIOL 105 combined: maximum credit, 4 units; UC – No credit for ZOO 145/145L if taken after ZOO 203, 205/205L, or 200

Introduction to the structure and function of human body systems in health and disease. Not recommended for those intending to take BIOL 105, 106, ZOO 200, 203, or 205.

ZOO 145L Introduction to Anatomy and Physiology Laboratory (1)

3 hours laboratory

Prerequisite: Completion of, or concurrent enrollment in, ZOO 145**Transfer acceptability:** CSU; UC – ZOO 145/145L and BIOL 106/106L or BIOL 105 combined: maximum credit, 4 units; UC – No credit for ZOO 145/145L if taken after ZOO 203, 205/205L, or 200

Introduction to the structure and function of human body systems. Includes study of cells, tissues, and human organ systems. Not recommended for those intending to take BIOL 105, 105L, 106, ZOO 200, 203, 205, or 205L.

ZOO 195A Field Study of Marine Invertebrates(1,2,3)

2, 4, or 6 hours lecture/laboratory

Note: Fee charged; may be taken 4 times

Transfer acceptability: CSU; UC – ZOO 195A-F combined: maximum credit, 2 courses

Extended field study of the fauna of marine intertidal and subtidal habitats of selected geographic regions, with emphasis upon field identification, observation and interpretation of behavioral and ecological interrelationships of animals to their environment and to one another. See Class Schedule for locality to be visited.

ZOO 195B Field Study of Marine Vertebrates (1,2,3)

2, 4, or 6 hours lecture/laboratory

Note: Fee charged; may be taken 4 times

Transfer acceptability: CSU; UC – ZOO 195A-F combined: maximum credit, 2 courses

Extended field study fishes and marine reptiles and mammals, with emphasis upon identification, behavior, and adaptations. See Class Schedule for locality to be visited.

ZOO 195C Field Study of Terrestrial Vertebrates (1,2,3)

2, 4, or 6 hours lecture/laboratory

Note: Fee charged; may be taken 4 times

Transfer acceptability: CSU; UC – ZOO 195A-F combined: maximum credit, 2 courses

Extended field study of terrestrial mammals, reptiles, and amphibians, emphasizing identification, behavior, adaptations, and ecology. See Class Schedule for locality to be visited.

ZOO 195D Field Study of Birds (1,2,3)

2, 4, or 6 hours lecture/laboratory

Note: Fee charged; may be taken 4 times

Transfer acceptability: CSU; UC – ZOO 195A-F combined: maximum credit, 2 courses

Extended field study of terrestrial and aquatic avifauna of selected habitats, emphasizing identification and observation of native and migratory birds, their behavior, and adaptations. See Class Schedule for locality to be visited.

ZOO 195E Field Study of Terrestrial and Aquatic Invertebrates (1,2,3)

2, 4, or 6 hours lecture/laboratory

Note: Fee charged; may be taken 4 times

Transfer acceptability: CSU; UC – ZOO 195A-F combined: maximum credit, 2 courses

Extended field study of the land and freshwater invertebrate life of selected areas, emphasizing taxonomic identification, behavior, and ecological relationships. See Class Schedule for locality to be visited.

ZOO 195F Field Studies in Animal Ecology (1,2,3)

2, 4, or 6 hours lecture/laboratory

Note: Fee charged; may be taken 4 times

Transfer acceptability: CSU; UC – ZOO 195A-F combined: maximum credit, 2 courses

Extended field studies of the fauna of selected ecosystems, emphasizing identification of animal species and observations upon their interspecific and conspecific interactions and ecological relationships with flora. See Class Schedule for locality to be visited.

ZOO 197 Zoology 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 Zoology. See Class Schedule for specific topic offered. Course title will designate subject covered.

ZOO 200 Anatomy (5)

3 hours lecture-6 hours laboratory

Prerequisite: BIOL 102; or BIOL 200; or BIOL 100; or BIOL 101 and 101L; or BIOL 105; or BIOL 106 and BIOL 106L

Transfer acceptability: CSU; UC – ZOO 200, 203, 205/205L

combined: maximum credit, 10 units; CAN BIOL 10; ZOO 200+203 =CAN BIOL SEQ B

Designed to provide a basic understanding of the structure of the human body. Laboratory study includes a study of anatomy through cat and organ dissection, skeletal study, use of human models and other visual aids.

ZOO 203 Physiology (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

Note: Not open to students with prior credit in ZOO 205 and/or 205L

Transfer acceptability: CSU; UC – ZOO 200, 203, 205/205L combined: maximum credit, 10 units; UC – ZOO 203 and 205/205L combined: maximum credit, 5 units; CAN BIOL 12; ZOO 200+203= CAN SEQ B

Principles of human physiology including laboratory exercises. Deals with physiology of muscle, nerve, circulation, respiration, excretion, digestion, the endocrines and exercise.

ZOO 205 Physiology Lecture (3)

3 hours lecture

Prerequisite: BIOL 102; or BIOL 200 and CHEM 100; or BIOL 100 and CHEM 100; or BIOL 105 and CHEM 100

Note: Not open to students with prior credit in ZOO 203

Transfer acceptability: CSU; UC – ZOO 200, 203, 205/205L combined: maximum credit, 10 units; UC – ZOO 203 and 205/205L combined: maximum credit, 5 units

Principles of human physiology. Deals with physiology of muscle, nerve, circulation, respiration, excretion, digestion, the endocrines and exercise.

ZOO 205L Physiology Laboratory (2)

6 hours laboratory

Prerequisite: Completion of, or concurrent enrollment in, ZOO 205

Note: Not open to students with prior credit in ZOO 203

Transfer acceptability: CSU; UC – ZOO 200, 203, 205/205L combined: maximum credit, 10 units; UC – ZOO 203 and 205/205L combined: maximum credit, 5 units

Laboratory exercises in principles of human physiology. Deals with physiology of muscle, nerve, circulation, respiration, excretion, digestion, the endocrines and exercise.

ZOO 295 Directed Study in Zoology (1,2,3)

3, 6, or 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 skills and/or proficiencies in Zoology 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.

Regional Occupational Program (ROP)

Palomar College, under contract with the San Diego County Office of Education, offers vocational and technical training through the Regional Occupational Program.

Courses provided through ROP are available to college and high school students, out-of-school youths, and adults residing in San Diego County. Courses can be used for basic job skills, upgrading of existing skills, or changing occupations. Units earned may be used for high school or college credit. ROP courses taken for college credit may be applied toward Palomar College Certificates/Degrees. For more information, contact the ROP Office in AA-136 or call (760) 744-1150, ext. 2293.

Air Conditioning, Heating and Refrigeration (R ACR)

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

Air Conditioning, Heating and Refrigeration

Prepares students for entry-level positions as air conditioning, heating, and refrigeration technicians. Also provides retraining and upgrading of skills for maintenance technicians, including EPA certification.

In order to earn a certificate, students must achieve a minimum grade of "C" in each of the certificate program courses.

Certificate of Proficiency

Program Requirements	Units
R ACR 50 AC, Heating, and Refrigeration: Electrical	4
R ACR 55 AC, Heating, and Refrigeration: Mechanical	4
R ACR 56 Adv AC/Heating/Refrigeration	4
R ACR 58 Refrigerant Recovery	1
TOTAL UNITS	13

COURSE OFFERINGS

Courses taken for college credit may be applied toward a certificate or an Associate in Arts degree.

Courses numbered under 100 are not intended for transfer credit.

R ACR 50 Air Conditioning, Heating and Refrigeration: Electrical (4)

8 hours lecture/laboratory

Note: Graded only; may be taken 4 times

Introduction to the fundamentals and application of electrical theory as related to air conditioning, heating and refrigeration. Study of basic electrical theory, alternating current, electrical controls, motors, schematics, and electrical meters.

R ACR 55 Air Conditioning, Heating and Refrigeration: Mechanical (4)

8 hours lecture/laboratory

Note: Graded only; may be taken 4 times

Introduction to basic mechanical theory of air conditioning, heating and refrigeration. Application of principles and techniques to include system components and their interrelated functions, safety procedures, tools, and equipment.

R ACR 56 Advanced Air Conditioning, Heating and Refrigeration (4)

8 hours lecture/laboratory

Prerequisite: R ACR 50 and 55

Note: Graded only; may be taken 2 times

Advanced principles and techniques of air conditioning, heating and refrigeration. EPA regulations and safety requirements; complex control

systems; gas furnace combustion and air requirements; and the installation, troubleshooting, repair, and maintenance of residential and small commercial units.

R ACR 58 Refrigerant Recovery (1)

2 hours lecture/laboratory

Note: Graded only; may be taken 2 times

Basic understanding of the United States Environmental Protection Agency regulations as set forth under Section 608 of the Clean Air Act of 1990, which described requirements for recycling ozone-depleting refrigerants. Preparation to take the EPA certification exam, which is administered at the conclusion of the course.

R ACR 97 Air Conditioning, Heating, and Refrigeration 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: Graded only; may be taken 4 times

Topics in Air Conditioning, Heating, and Refrigeration. See Class Schedule for specific topic offered. Course title will designate subject covered.

Automotive Technology (R AT)

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

Auto Body Work

In order to earn a certificate, students must achieve a minimum grade of "C" in each of the certificate program courses.

A.A. Degree Major or Certificate of Achievement

Program Requirements	Units
R AT 50 Auto Body Repair I	4
R AT 51 Auto Body Repair II	4
R AT 55 Auto Refinishing I	4
R AT 56 Auto Refinishing II	4
Elective Courses (Select 6 Units)	
AT 100 Auto Maintenance and Minor Repair	3
AT 105 Automotive Electricity	2
CE 100 Cooperative Education	1,2,3,4
IT 100 Technical Mathematics	3
WELD 100 Welding I	3
TOTAL UNITS	22

The Auto Body Work program is also listed under Auto Technology.

COURSE OFFERINGS

Courses taken for college credit may be applied toward a certificate or an Associate in Arts degree.

Courses numbered under 100 are not intended for transfer credit.

R AT 50 Auto Body Repair I (4)

8 hours lecture/laboratory

Note: Graded only; may be taken 3 times

Automotive body work with emphasis on repair. Includes welding; working with small damage points; restoring contour of body panels and sections; and realigning bumpers, fenders, doors, and hoods.

R AT 51 Auto Body Repair II

8 hours lecture/laboratory

Recommended preparation: R AT 50**Note:** Graded only; may be taken 3 times

Automotive body work with emphasis on increasing diagnostic, estimating and repair skills and updating techniques and related technologies. Introduction to collision industry standards including I-CAR and ASE.

R AT 55 Auto Refinishing I

8 hours lecture/laboratory

Note: Graded only; may be taken 3 times

Introduction to auto refinishing. Preparation of auto surfaces for refinishing: taping, cleaning, and sanding. Refinishing auto surfaces: sanding, application of primers and paint.

R AT 56 Auto Refinishing II

8 hours lecture/laboratory

Recommended preparation: R AT 55**Note:** Graded only; may be taken 3 times

Skills development in automotive refinishing techniques including base-coat clear-coat application. Color matching concepts. Identification, prevention and correction of painting problems. Update on new products, techniques, and trends.

R AT 90 Automotive Upholstery

8 hours lecture/laboratory

Note: Cross listed as R UP 90; graded only; may be taken 2 times

Skills and techniques required to replace, repair or customize automotive and related upholstery. Fabrication of interiors and accessories for automobile interiors, watercraft and other recreational vehicles. Techniques and considerations related to auto alarm or sound system installation. Students will complete individual or group projects.

R AT 97 Auto Body Repair/Auto Refinishing 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: Graded only; may be taken 4 times

Topics in auto body repair and auto refinishing. See Class Schedule for specific topic offered. Course title will designate subject covered.

Computer Science and Information Systems (R CSIS)

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

Applications Support Specialist

This program prepares students for employment as technicians supporting software applications such as Microsoft Office Suite in a help desk environment. Building on applications proficiency, it includes supporting coursework in computer hardware, operating systems, web site development and customer support fundamentals.

In order to earn a certificate, students must achieve a minimum grade of "C" in each of the certificate program courses.

Certificate of Proficiency

Program Requirements	Units
R CSIS/CSIS 170 Windows	1
R CSIS/CSIS 120 Microcomputer Applications	3
R CSIS/CSIS 137 Web Site Development with HTML	2
R CSIS 172 Windows for Technicians	2
R CSIS 157 or Windows XP: Professional/Server	
R CSIS 158 Windows 2000	3
R CSIS 65 Help Desk Fundamentals	2
TOTAL UNITS	13

(4) Computer Technology

This program prepares students for employment in various areas of business and industry requiring technical support for stand-alone and networked computer systems. It is designed to provide the basics of computer hardware and software theory and application, familiarity with a variety of operating systems and the fundamentals of networking. Hands-on labs with an emphasis on problem-solving and troubleshooting provide opportunities for the application of theoretical knowledge to real and simulated system malfunctions.

A.A. Degree Major or Certificate of Achievement

Program Requirements	Units
R CSIS 140 Command Line Operations	3
R CSIS/CSIS 145 Introduction to Linux	3
R CSIS 155 Computer Technology – Hardware	3
R CSIS 156 or Computer Technology – Software	
CSIS 108 Hardware and O.S. Fundamentals	3
R CSIS 172 Windows for Technicians	2
R CSIS/CSIS 120 Microcomputer Applications	3
R CSIS 157 Windows XP: Professional/Server	3
R CSIS 158 or Windows 2000	
CSIS 162 and Windows Client	3
CSIS 163 Windows Server	3
R CSIS 160 or Introduction to Local Area Networking	3
CSIS 111 Networking Fundamentals	4

Electives (Select a minimum of 6 units)

R CSIS 159 Industry Certification: Review and Prep	1
CSIS 160 Survey of Computer Science	4
R CSIS 161 PC/Network Security	3
R CSIS 169 Overview of Computer Forensics	3
R CSIS 65 Help Desk Fundamentals	2
R CSIS/CSIS 137 Web Site Development with HTML	2
ECHT 100 Electronic Components and Circuits	4.5
ECHT 203 Digital/Computer Electronics	4.5
TOTAL UNITS	32-36

Microcomputer Operating Systems

Prepares students for employment in various areas of microcomputer support, specifically operating systems and software installation and support. Focus on client and server applications of Microsoft Windows user and server operating systems. Includes evolution of operating systems, upgrade and transition to emerging industry standards.

In order to earn a certificate, students must achieve a minimum grade of "C" in each of the certificate program courses.

Certificate of Proficiency

Program Requirements	Units
R CSIS 140 Command Line Operations	3
R CSIS/CSIS 170 Windows	1
R CSIS 172 Windows for Technicians	2
R CSIS 158 Windows 2000	3
R CSIS 157 Windows XP: Professional and Server	3
TOTAL UNITS	12

Microcomputer Technology

Prepares students for entry-level positions supporting, maintaining and repairing stand-alone and networked microcomputer systems.

In order to earn a certificate, students must achieve a minimum grade of "C" in each of the certificate program courses.

Certificate of Proficiency

Program Requirements	Units
R CSIS 140 Command Line Operations	3
R CSIS 155 Computer Technology - Hardware	3
R CSIS 156 Computer Technology - Software	3
R CSIS 160 Introduction to Local Area Networking	3
TOTAL UNITS	12

PC Repair Technician

Prepares students for mid-level positions as PC Repair Technician. Focus on microcomputer structure and Windows operating system. Students will develop skills in component identification, preparation and setup; memory system and repair; power supplies; multiple hard disk preparation, testing and installation; current technology trends and troubleshooting and customer relations.

In order to earn a certificate, students must achieve a minimum grade of "C" in each of the certificate program courses.

Certificate of Proficiency

Program Requirements		Units
R CSIS 156	Computer Technology - Software	3
R CSIS 159	Industry Certification: Review & Preparation	1
R CSIS 172	Windows for Technicians	2
TOTAL UNITS		6

PC Support Technician

Prepares students for entry-level positions as PC Support Technician. Instructional focus on installation, upgrade, maintenance, and repair of microcomputers to the modular level.

In order to earn a certificate, students must achieve a minimum grade of "C" in each of the certificate program courses.

Certificate of Proficiency

Program Requirements		Units
R CSIS 140	Command Line Operations	3
R CSIS 155	Computer Technology - Hardware	3
TOTAL UNITS		6

Software Applications Specialist

Prepares students for employment in positions that require competence in software applications common to business and industry.

In order to earn a certificate, students must achieve a minimum grade of "C" in each of the certificate program courses.

Certificate of Proficiency

Program Requirement		Units
R CSIS/CSIS 120	Microcomputer Applications	3
R CSIS 121	Microcomputer Applications – Advanced	3
R CSIS/CSIS 137 or	Web Site Development with HTML	
R CSIS 138	Website Design with FrontPage	2
R CSIS/CSIS 170	Windows	1
R CSIS 186	Contemporary Job Search	1
TOTAL UNITS		10

COURSE OFFERINGS

Courses taken for college credit may be applied toward a certificate or an Associate in Arts degree.

Courses numbered under 100 are not intended for transfer credit.

R CSIS 65 Help Desk Fundamentals (2)

4 hours lecture/laboratory

Recommended preparation: R CSIS 121 and 172 or 157 or 158

Note: Graded only

A comprehensive overview of the Help Desk environment. Builds on basic software and hardware knowledge to provide entry-level training in computer user support. Includes critical skills in professionalism; communication; call management, customer service and related job stress. Hands-on simulations enable students to identify and troubleshoot a variety of commonly occurring problems.

R CSIS 97 Computer Science and Information Systems 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: Graded only; may be taken 4 times

Topics in Computer Science and Information Systems. See Class Schedule for specific topic offered. Course title will designate subject covered.

R CSIS 116 Introduction to Computers (2)

1 hour lecture-2 hours lecture/laboratory

Note: Graded only

Transfer acceptability: CSU

Introduction to basic computer operations and the Windows operating system for students with little or no background in computer science. Includes terminology and techniques as well as keyboarding and mouse functions. Also includes: window management; creating and managing files and folders; performing basic system maintenance using Windows accessory programs; word processing; and accessing the Internet.

R CSIS 120 Microcomputer Applications (3)

1 hour lecture-4 hours lecture/laboratory

Note: Cross listed as CSIS 120; graded only; may be taken 4 times; maximum of 4 completions in any combination of CSIS/R CSIS 120, CSIS 121

Transfer acceptability: CSU

Hands-on experience with microcomputers and microcomputer applications featuring the use of Windows, word processing, spreadsheet, database, and presentation graphics software.

R CSIS 121 Microcomputer Applications - Advanced (3)

1 hour lecture, 4 hours lecture/laboratory

Prerequisite: R CSIS/CSIS 120

Note: Graded only; may be taken 2 times

Transfer acceptability: CSU

This course builds upon fundamental knowledge of Windows operating system and Microsoft Office Suite (Word, Excel, Access and PowerPoint) to progress into advanced functions of each element as well as integration of various elements.

R CSIS 125 Presenting with PowerPoint (1)

1 hour lecture/laboratory

Recommended preparation: R CSIS/CSIS 170

Note: Graded only

Transfer acceptability: CSU

Comprehensive study and application of PowerPoint multimedia capabilities to create effective audience-focused presentations, live and web-based. Preparation of documents in various formats to include: animated slideshows, speaker notes, audience handouts, outlines and web sites.

R CSIS 127 Word Processing Software – Basic (1)

2 hours lecture/laboratory

Recommended preparation: A keyboarding speed of 20 net words a minute

Note: Graded only; may be taken 4 times

Transfer acceptability: CSU

Study of word processing skills using Microsoft Office. Course includes file creation, modification, and formatting, saving and printing files, graphics, report generation elements, and integration of Word documents within the Office suite. Hands-on labs using state of the art software are an integral part of this course, as well as guided instruction.

R CSIS 130 Microsoft Publisher (1)

2 hours lecture/laboratory

Recommended preparation: R CSIS 170 and R CSIS 127 or BUS 170 or OIS 136.1

Note: Cross listed as BUS 186; graded only; may be taken 4 times.

Hands-on applications of Microsoft Publisher, a comprehensive software package that combines text, graphics, illustrations, and photographs to produce typeset quality documents for local printer output or commercial printing. Includes: newsletters; brochures; flyers; web pages; business cards; letterheads and envelopes; advertising and marketing materials; greeting cards; PDF and web file formats; and printing options.

R CSIS 137 Web Site Development with HTML (2)

4 hours lecture/laboratory

Note: Cross listed as CSIS 137; graded only

Transfer acceptability: CSU

This course provides a foundation to Internet/Intranet technologies. This course primarily teaches the skills required to develop and publish Web sites utilizing HTML, including using HTML tables, Frames, Web Page Forms, and basic CSS (Cascading Style Sheets).

R CSIS 138 Website Design with FrontPage (2)*4 hours lecture/laboratory***Recommended preparation:** R CSIS/CSIS 137**Note:** Graded only

Comprehensive study of web site development and maintenance using Microsoft FrontPage. Includes creation of web pages, application of design elements; comparison of search engines, familiarity with source code, and use of interactive forms to create client databases. Also includes uploading, testing and modification of web site.

R CSIS 140 Command Line Operations (3)*6 hours lecture/laboratory***Note:** Graded only

Introduction to the basic principles of computer operating systems and command line operations, using DOS (Disk Operating System) as a foundation. Includes: introduction to computer hardware; comparative overview of operating systems, managing files, disks and directories; batch files; controlling peripherals; disk maintenance, optimization and data recovery; and configuring system environment.

R CSIS 145 Introduction to Linux (3)*6 hours lecture/laboratory***Note:** Cross listed as CSIS 145; graded only**Transfer acceptability:** CSU

An overview of the Linux operating system, utilities, and associated applications for workstations. Includes installation, configuration and troubleshooting of Linux Systems within the command-line environment and the graphical X-Windows environment.

R CSIS 150 Computer Spreadsheets (3)*6 hours lecture/laboratory***Note:** Graded only**Transfer acceptability:** CSU

In-depth study of the varied applications of spreadsheets using Microsoft Excel. Create, modify, format and maintain multiple page worksheets; enter numeric and text data for manipulation; and create and copy formulas. Includes integration of Excel spreadsheets within Microsoft Office Suite. Hands-on experience in networked lab.

R CSIS 155 Computer Technology – Hardware (3)*6 hours lecture/laboratory***Note:** Graded only; may be taken 2 times

Introduction to the basic principles of computer hardware architecture and design. Hands-on course includes microcomputer design, assembly and troubleshooting. Course content aligns with objectives of the A+ certification core exam.

R CSIS 156 Computer Technology – Software (3)*6 hours lecture/laboratory***Note:** Graded only; may be taken 2 times**Prerequisite:** R CSIS 140

Fundamentals of computer operating systems and Local Area Network (LAN). Hands-on approach to installing, troubleshooting, and supporting operating systems, networking fundamentals, and preparation for the A+ OS certification exam.

R CSIS 157 Windows XP: Professional and Server (3)*6 hours lecture/laboratory***Recommended preparation:** R CSIS/CSIS 170**Note:** Graded only; may be taken 2 times**Transfer acceptability:** CSU

A focused study of Microsoft Windows XP Professional and Server operating systems. Includes hands-on experience installing, configuring, optimizing, maintaining and troubleshooting Windows XP Professional on stand-alone and client computers in workgroup or domain environment. Study of Windows.NET Server includes setup and configuration of Active Directory Service.

R CSIS 158 Windows 2000 (3)*6 hours lecture/laboratory***Recommended preparation:** R CSIS/CSIS 170**Note:** Graded only; may be taken 2 times

Core knowledge and skills for supporting Microsoft Windows 2000 operating system. Includes installing, configuring, customizing, optimizing, networking, integrating, and troubleshooting.

R CSIS 159 Industry Certification: Review and Preparation (1)*2 hours lecture/laboratory***Note:** Graded only; may be taken 2 times

A focused study of industry and professional certifications available for PC technicians. Review of Microsoft, Novell, and CTIA certification

programs. Content review and preparation for A+ Certification Examination.

R CSIS 160 Introduction to Local Area Networking (3)*6 hours lecture/laboratory***Prerequisite:** R CSIS 155 and 156**Note:** Graded only; may be taken 2 times

Introduction to the basic principles of Local Area Networking (LAN) structure and function. Hands-on experience in design, construction, installation, maintenance and repair to the modular level using operating systems and diagnostic hardware and software.

R CSIS 161 PC/Network Security (3)*6 hours lecture/laboratory***Note:** Graded only**Transfer acceptability:** UC

Comprehensive overview of computer security, including stand-alone and networked systems. Includes: fundamentals of network security principles and implementation; e-mail, web and data transmission security; infrastructure security; cryptography; and operational/organizational security, including disaster recovery.

R CSIS 169 Overview of Computer Forensics (3)*6 hours lecture/laboratory***Prerequisite:** R CSIS 161**Note:** Graded only

Introduction to computer forensics and investigation including digital information recovery and analysis. Includes hands-on exercises, case studies and discussion of computer forensic ethics. Course content aligns with the objectives of the International Association of Computer Investigative Specialists (IACIS) certification.

R CSIS 170 Windows (1)*2 hours lecture/laboratory***Note:** Cross listed as CSIS 170; graded only**Transfer acceptability:** CSU

Fundamentals of Windows Graphical User Interface. Students will develop proficiency in: changing desktop settings; file/folder management at both desktop and Explorer levels; and basic system maintenance.

R CSIS 172 Windows for Technicians (2)*4 hours lecture/laboratory***Recommended preparation:** R CSIS/CSIS 170**Note:** May be taken 2 times; graded only

A technical study of the Windows operating system; hands-on experience installing, configuring, optimizing, maintaining, and troubleshooting.

R CSIS 175 Excel (1)*2 hours lecture/laboratory***Note:** Graded only; may be taken 2 times; graded only**Transfer acceptability:** CSU

Study of spreadsheets using Microsoft Excel. Course includes creating spreadsheets, formatting data, manipulating data, creation and application of formulas, charting data, and printing considerations. Preparation for the Excel MOS certification exam.

R CSIS180 Access (1)*2 hours lecture/laboratory***Note:** Graded only; may be taken 2 times**Transfer acceptability:** CSU

Study of Access database program within the Microsoft Office Suite. This class introduces and reinforces the creation, modification and maintenance of Access databases. Students will create the database structure, enter data in tables, execute queries, generate reports and forms, modify properties and layout at the design level and maintain the database. Preparation for the Access MOUS certification exam.

R CSIS 186 Contemporary Job Search Techniques (1)*2 hours lecture/laboratory***Note:** Graded only

Use the Internet, current software and research tools to organize and implement a job search. Includes: on-line resources; preparation and posting of application materials, including resume and cover letters; interview strategies and mock interviews; industry speakers, and hard copy and online portfolios.

Culinary Arts (R CUL)

See also Culinary Arts

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

Culinary Arts

Prepares students for employment and career opportunities in various areas of the foodservice industry. The focus is on food preparation and production skills, with supporting coursework in nutrition, food sanitation and safety, menu planning, purchasing and inventory control, kitchen management and employee supervision. Practical hands-on lab activities in a commercial kitchen environment and directed workplace learning opportunities prepare students for foodservice positions in resorts, casinos, and fine dining establishments.

Students will need to possess a current San Diego County Food Handler Card to participate in kitchen/lab activities.

In order to earn a certificate or degree, students must achieve a minimum grade of "C" in each of the certificate program courses.

A.A. Degree Major or Certificate of Achievement

Program Requirements	Units
FCS/	
MICR 110 Microbiology and Foods	3
FCS/HE 165 Fundamentals of Nutrition	3
R CUL/	
CUL 110 Culinary Essentials I	3
R CUL/	
CUL 111 Culinary Essentials II	3
R CUL/	
CUL 120 Patisserie and Baking I	3
R CUL/	
CUL 121 Patisserie and Baking II	3
R CUL/	
CUL 130 Pantry/Garde Manger	3
R CSIS/	
CSIS 120 Microcomputer Applications	3
R CUL/	
CUL 200 Menu Planning and Purchasing	2
R CUL/	
CUL 210 Foodservice Management	3
R CUL/	
CUL 220 Catering and Event Planning	3
R CUL/	
CUL 298 Culinary Directed Practice I	3
R CUL/	
CUL 299 Culinary Directed Practice II	3

Electives (Select a minimum of 3 units)

R CUL/		
CUL 115 Dining Room Service	2	
R CUL/		
CUL 150 International Cuisine	3	
R CUL/		
CUL 230 Adv Garde Manger/Competition	3	
R CUL/		
CUL 240 Wines and Affinities	1	
TOTAL UNITS	41	

Culinary Skills

With a focus on basic food preparation and production skills, nutrition, and food safety and sanitation, the program prepares students for various entry-level positions in the foodservice industry. Practical hands-on lab activities in a modern commercial kitchen environment provide opportunities for students to master the skills required for employment.

Students will need to possess a current San Diego County Food Handler Card to participate in required kitchen/lab activities.

In order to earn a certificate, students must achieve a minimum grade of "C" in each of the certificate program courses.

Certificate of Proficiency

Program Requirements	Units
FCS/	
MICR 110 Microbiology and Foods	3
FCS/HE 165 Fundamentals of Nutrition	3
R CUL/	
CUL 110 Culinary Essentials I	3
R CUL/	
CUL 111 Culinary Essentials II	3
R CUL/	
CUL 130 Pantry/Garde Manger	3
R CUL/	
CUL 115 Dining Room Service	2
TOTAL UNITS	17

Patisserie and Baking

With a focus on commercial baking and pastry making, the program prepares students for entry-level positions in bakeries, restaurants, resorts and casino operations. Practical hands-on lab activities in a modern commercial kitchen environment provide opportunities for students to master the skills required for employment.

Students will need to possess a current San Diego County Food Handler Card to participate in required kitchen/lab activities.

In order to earn a certificate, students must achieve a minimum grade of "C" in each of the certificate program courses.

Certificate of Proficiency

Program Requirements	Units
FCS/	
MICR 110 Microbiology and Foods	3
FCS/HE 165 Fundamentals of Nutrition	3
R CUL/	
CUL 120 Patisserie and Baking I	3
R CUL/	
CUL 121 Patisserie and Baking II	3
TOTAL UNITS	12

COURSE OFFERINGS

R CUL 110 Culinary Essentials I (3)

1 hour lecture - 4 hours laboratory

Prerequisite: Current San Diego County Food Handler Card

Recommended preparation: FCS/MICR 110

Note: Cross listed as CUL 110; graded only

Introduction to culinary arts and the foodservice industry. Fundamentals of food preparation and production, emphasizing industry standards. Lab work will focus on knife skills, standard cuts, and preparation of vegetables and starches. Students will be expected to meet high standards of professionalism, sanitation and work habits.

R CUL 111 Culinary Essentials II (3)

1 hour lecture - 4 hours laboratory

Prerequisite: R CUL/CUL 110

Note: Cross listed as CUL 111; graded only

Advanced food production, including meat and protein fabrication. Lab work will include: stocks, sauces and soups; meat and game; poultry; fish and seafood; breakfast foods and classical cuisine. Students will be expected to meet high standards of professionalism, sanitation and work habits.

R CUL 115 Dining Room Service (2)

4 hours lecture/laboratory

Prerequisite: Current San Diego County Food Handler Card

Note: Cross listed as CUL 115; graded only

Orientation to dining room operations with an emphasis on dining room service, techniques of table waiting, and dining room skills. Students will be expected to meet high standards of professionalism, sanitation and work habits.

R CUL 120 Patisserie and Baking I (3)

1 hour lecture - 4 hours lecture/laboratory

Prerequisite: Current San Diego County Food Handler Card**Recommended Preparation:** FCS/MICR 110**Note:** Cross listed as CUL 120; graded only

Fundamentals of baking, including ingredient properties and function, and preparation and evaluation of a variety of yeast products, quick breads, cookies, cakes, pies and pastries. Students will be expected to meet high standards of professionalism, sanitation and work habits.

R CUL 121 Patisserie and Baking II (3)

1 hour lecture - 4 hours lecture/laboratory

Prerequisite: R CUL/CUL 120**Note:** Cross listed as CUL 121; graded only

Advanced skills in the art of patisserie. Includes: classic pastries, pâte à choux and meringues; plated desserts; cake decorating; chocolate and sugar techniques. Students will be expected to meet high standards of professionalism, sanitation and work habits.

R CUL 130 Pantry/Garde Manger (3)

1 hour lecture - 4 hours lecture/laboratory

Prerequisite: Current San Diego County Food Handler Card**Recommended Preparation:** R CUL/CUL 110**Note:** Cross listed as CUL 130; graded only

Introduction to cold food preparation and display. Includes salads, dressings, sandwiches and canapés. Students will be expected to meet high standards of professionalism, sanitation and work habits.

R CUL 150 International Cuisine (3)

1 hour lecture - 4 hours lecture/laboratory

Prerequisite: Current San Diego County Food Handler Card**Note:** Cross listed as CUL 150; graded only

A hands-on cooking, tasting and evaluating exploration of the major cuisines of the world. Includes Asian, Latin, European and American cuisines with a focus on the cultures that influenced their development. Students will be expected to meet high standards of professionalism, sanitation and work habits.

R CUL 200 Menu Planning and Purchasing (2)

2 hours lecture

Prerequisite: R CUL/CUL 111 and FCS 165/HE 165 and R CSIS/CSIS 120**Note:** Cross listed as CUL 200; graded only

Basic principles of menu planning and purchasing with emphasis on: menu design; specifications and pricing; purchasing, inventory control and storeroom operations; and food and beverage cost control. Includes spreadsheet and database applications. Students will be expected to meet high standards of professionalism and work habits.

R CUL 210 Foodservice Management (3)

3 hours lecture

Prerequisite: R CUL/CUL 111**Note:** Cross listed as CUL 210; graded only

Introduction to foodservice management with emphasis on human relations and employee development. Includes operational planning and coordination, problem-solving and decision-making, and personnel management. Students will be expected to meet high standards of professionalism and work habits.

R CUL 220 Catering and Event Planning (3)

1 hour lecture - 4 hours lecture/laboratory

Prerequisite: R CUL/CUL 111 and R CUL/CUL 130**Note:** Cross listed as CUL 220; graded only

Fundamentals of catering, including event planning, menu development and banquet preparation. Includes opportunities to apply culinary theory and skills in actual practice. Students will be expected to meet high standards of professionalism, sanitation and work habits.

R CUL 230 Adv Garde Manger/Competition (3)

1 hour lecture - 4 hours lecture/laboratory

Prerequisite: R CUL/CUL 111 and R CUL/CUL 130**Note:** Cross listed as CUL 230; graded only

Application of advanced garde manger techniques in practical situations and culinary competition. Includes classical buffet presentation, decorative displays and artistic centerpieces. Students will be expected to meet high standards of professionalism, sanitation and work habits.

R CUL 240 Wines and Affinities (1)

1 hour lecture

Prerequisite: R CUL/CUL 111**Note:** Cross listed as CUL 240; graded only

Classification and identification of wines, with emphasis on properties and affinities with food. Includes wines from various regions of the world. Students will be expected to meet high standards of professionalism and work habits.

R CUL 298 Culinary Directed Practice I (3)

3 hours lecture – 10 hours lab

Prerequisite: R CUL/CUL 111 and R CUL/CUL 130 or R CUL/CUL 121**Note:** Cross listed as CUL 298; graded only

Directed learning opportunity for culinary arts students to increase their knowledge and skill in the areas of hot and cold food production through supervised on-the-job training. Students will be expected to follow Culinary Arts standards of professionalism. Current San Diego County Food Handler Card and TB clearance required.

R CUL 299 Culinary Directed Practice II (3)

3 hours lecture-10 hours lab

Prerequisite: RCUL/CUL 298, R CUL/CUL 200, FCS 110/MICR 110 and FCS 165**Note:** Cross listed as CUL 299; graded only

Directed entry-level professional work experience in the foodservice industry that provides exposure to the foodservice industry and an opportunity for culinary arts students to practice and demonstrate their employability skills and reflect on their future roles in the industry. Students will be expected to follow Culinary Arts standards of professionalism. Current San Diego County Food Handler Card and TB clearance required.

Diesel Mechanics Technology (R DMT)

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

Diesel Technology

In order to earn a certificate, students must achieve a minimum grade of "C" in each of the certificate program courses.

A.A. Degree Major or Certificate of Proficiency

Program Requirements		Units
AT 105	Automotive Electricity	2
AT 197	Associated Studies in Automotives	3
RDMT/DMT 50	Introduction to Diesel Mechanics	3
RDMT/DMT 55	Heavy-Duty Diesel Tune-up/ Engine Analysis	3
RDMT/DMT 61	Diesel Engine Rebuilding I	3
RDMT/DMT 62	Diesel Engine Rebuilding II	3
RDMT/DMT 65	Air Brake Systems	3
RDMT/DMT 66	Truck Transmission and Drive Lines	3
IT 100	Technical Mathematics	3
Electives (Select 6 units)		
AT 125	Automotive Machining	3
CE 100	Cooperative Education	1,2,3,4
DMT 54	Heavy-Duty Electricity	3
DMT 56	Alternative Fuels	3
RDMT/DMT 70	Medium-Duty Diesel Engine Tune-up	3
DMT 81	Basic Hydraulics	3
DMT 96	Special Problems in Diesel Technology	.5-3
RDMT/DMT 97	Diesel Mechanics Technology Workshop	.5-3
WELD 100	Welding I	3
TOTAL UNITS		32

The Diesel Technology program is also offered in Diesel Mechanics Technology.

COURSE OFFERINGS

Courses taken for college credit may be applied toward a certificate or an Associate in Arts degree.

Courses numbered under 100 are not intended for transfer credit.

R DMT 50 Introduction to Diesel Mechanics (3)

6 hours lecture/laboratory

Note: Cross listed as DMT 50; graded only

Theory and practice of fundamental skills for the maintenance and operation of basic diesel engines. Topics for study include: basic theory of operation; engine applications; engine lubricating and cooling; intake, exhaust and fuel systems; and electronic control.

R DMT 55 Heavy-Duty Diesel Tune-Up and Engine Analysis (3)

2 hours lecture-4 hours laboratory

Prerequisite: DMT 50

Note: Cross listed as DMT 55; graded only; may be taken 2 times

The use of software and diagnostic equipment in performing diesel tune-up. Topics include: theory of operation, tune-up procedures, fuel system function and repair, diagnostic equipment usage, electronic engine controls, mechanical and electronic engine system troubleshooting.

R DMT 61 Diesel Engine Rebuilding I (3)

6 hours lecture/laboratory

Recommended preparation: R DMT/DMT 50

Note: Cross listed as DMT 61; graded only; may be taken 2 times

Theory and practice in rebuilding diesel engines. Topics for study include disassembly, cleaning, inspection, and analysis of engine parts. Also included are cylinder head service, sleeve and piston service, advanced machining and measuring techniques.

R DMT 62 Diesel Engine Rebuilding II (3)

6 hours lecture/laboratory

Prerequisite: R DMT/DMT 61

Note: Cross listed as DMT 62; graded only

Theory and practice in rebuilding diesel engines. Topics for study include final cleaning, inspection and reassembly of engine parts. Also included are assembly measuring, torque procedures and torque-turn methods used on engine assembly, and engine testing upon completion of assembly.

R DMT 65 Air Brake Systems (3)

2 hours lecture-3 hours laboratory

Note: Cross listed as DMT 65; graded only

The service and repair of heavy-duty hydraulic and air brake systems and their components. Topics of study include brake troubleshooting, complete system repair, anti-skid brake system, and related axle services.

R DMT 66 Truck Transmission and Drive Line (3)

2 hours lecture-3 hours laboratory

Note: Cross listed as DMT 66; graded only

Service and repair of heavy-duty truck drive lines. Topics for study include the disassembly, inspection, and reassembly of single and multiple disc clutches, four to fifteen speed transmissions, universal joints, and differentials.

R DMT 70 Medium-Duty Diesel Engine Tune-Up (3)

2 hours lecture-4 hours laboratory

Note: Cross listed as DMT 70; graded only; may be taken 2 times

The use of diesel tune-up and diagnostic equipment. Topics include: fuel systems; compression testing; fuel pump and injection timing; troubleshooting procedures; alternators, regulators, and starting systems.

R DMT 97 Diesel Mechanics Technology 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: Cross listed as DMT 97; graded only; may be taken 4 times

A special selection of topics specific in nature. The contents will vary depending on specific needs of the students and community.

Drafting Technology (R DT)

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

COURSE OFFERINGS

Courses taken for college credit may be applied toward a certificate or an Associate in Arts degree.

Courses numbered under 100 are not intended for transfer credit.

R DT 125 AutoCAD Introduction to Computer Aided Drafting (3)

6 hours lecture/laboratory

Note: Cross listed as DT 125; may be taken 2 times; maximum of 4 completions in any combination of DT/R DT 125, DT/R DT 126, DT/R DT 127

Transfer acceptability: CSU; UC – R DT 125 and 126 combined: maximum credit, one course

An introduction to computer aided drafting using AutoCAD software and IBM compatible computers. Hands-on experience with AutoCAD to include the following operations: preparing and editing drawings, storage and retrieval of drawings, and production of commercial quality drawings on a plotter. Introductory computer terminology and techniques in Windows.

R DT 126 AutoCAD Intermediate Computer Aided Drafting (3)

6 hours lecture/laboratory

Prerequisite: DT/R DT 125

Note: Cross listed as DT 126; may be taken 2 times; maximum of 4 completions in any combination of DT/R DT 125, DT/R DT 126, DT/R DT 127

Transfer acceptability: CSU; UC – R DT 125 and 126 combined: maximum credit, one course

Advanced theory and hands-on operation of a CAD system. Emphasis is placed on large scale drawings, three-dimensional software techniques, orthographic projections, and complex computer aided manufacturing applications.

R DT 127 AutoCAD Customization (3)

6 hours lecture/laboratory

Prerequisite: R DT/DT 126

Note: Cross listed as DT 127; may be taken 2 times; maximum of 4 completions in any combination of DT/R DT 125, DT/R DT 126, DT/R DT 127

Transfer acceptability: CSU

Advanced theory and hands-on operation of a CAD system. Emphasis is placed on increased productivity, using customization and portfolio presentation for successful career opportunities.

R DT 128 SolidWorks Introduction to 3D Design and Presentation (3)

6 hours lecture/laboratory

Prerequisite: DT 110

Note: Cross listed as DT 128; may be taken 2 times

Transfer acceptability: CSU

Advanced theory and hands-on operation of three-dimensional software techniques. Emphasis is placed on wireframe, surface, solid, and parametric three-dimensional modeling.

R DT 130 CAD/CAM Machining (3)

6 hours lecture/laboratory

Prerequisite: DT 110 and DT/R DT 128

Note: Cross listed as DT 130; graded only; may be taken 2 times

Hands-on operation of importing three-dimensional solid and parametric three-dimensional models into CAD/CAM operations.

R DT 131 SolidWorks Advanced 3D Design and Presentation (3)

6 hours lecture/laboratory

Prerequisite: DT/R DT 128

Note: Cross listed as DT 131; may be taken 2 times

Transfer acceptability: CSU

Advanced theory and hands-on operation of solid and parametric three-

dimensional models. Emphasis is placed on creating molds, advanced sheet metal design and developing dynamic assemblies.

R DT 200 Advanced Computer Aided Architectural Drafting (4)

8 hours lecture/laboratory

Prerequisite: DT/R DT 125 and completion of, or concurrent enrollment in, DT 105

Note: Cross listed as DT 200; graded only; may be taken 2 times

Transfer acceptability: CSU

Advanced techniques in the operation of AutoCAD software for architectural applications on IBM-compatible computers. Preparation of various architectural working drawings from a preliminary residential design.

R DT 202 Advanced Computer Aided Architectural Drafting II (4)

8 hours lecture/laboratory

Recommended preparation: DT/R DT 200

Note: Cross listed as DT 202; graded only; may be taken 2 times

Transfer acceptability: CSU

Third-party architectural software for use in conjunction with AutoCAD software. Preparation of 3D architectural models and their manipulation for preparation of individual architectural working drawings including: dimensioned floor plans, building sections, elevations, etc.

Graphic Communications (R GC)

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

COURSE OFFERINGS

Courses taken for college credit may be applied toward a certificate or an Associate in Arts degree.

R GC 140 Digital Imaging/Photoshop I (3)

6 hours lecture/laboratory

Note: Cross listed as GC 140; graded only; 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.

R GC 149 Page Layout and Design I (3)

6 hours lecture/laboratory

Note: Cross listed as 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.

R GC 152 Desktop Publishing with Illustrator (3)

6 hours lecture/laboratory

Note: Cross listed as GC 152; graded only; 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.

R GC 170 Screen Printing (3)

6 hours lecture/laboratory

Note: Cross listed as GC 170; graded only; 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.

R GC 172 Textile Screen Printing (3)

6 hours lecture/laboratory

Note: Cross listed as GC 172; graded only; may be taken 3 times

Transfer acceptability: CSU

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

R 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 GC 197A; graded only; may be taken 3 times

Transfer acceptability: CSU

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

R GC 200 Introduction to Multimedia (3)

6 hours lecture/laboratory

Note: Cross listed as GC 200; graded only; 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.

R GC 202 Web Page Layout I (3)

6 hours lecture/laboratory

Note: Cross listed as GC 202; graded only; 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.

R GC 203 Interactive Publishing with PDF's (3)

6 hours lecture/laboratory

Note: Cross listed as GC 203; graded only; may be taken 4 times

Transfer acceptability: CSU

Hands-on instruction in creating electronic documents that can be viewed, searched, and printed from virtually any computer or printer.

R GC 249 Page Layout and Design II (3)

6 hours lecture/laboratory

Note: Cross listed as 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.

R GC 260 Portfolio Development and Presentation (3)

6 hours lecture/laboratory

Prerequisite: R GC/GC 140 and R GC/GC 152

Note: Cross listed as GC 260; graded only; 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.

Optical Technology (R OT)

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

Optical Technology

Prepares students for entry-level positions as optical dispensing technicians, optical lab technicians, optometric assistants, ophthalmic assistants, and other occupations in the vision care field.

In order to earn a certificate, students must achieve a minimum grade of "C" in each of the certificate program courses.

Certificate of Proficiency

Required Courses		Units
R OT 50	Optical Technology I	8
R OT 55	Optical Technology II	8
TOTAL UNITS		16

Recommended Electives: R OT 60, 97

COURSE OFFERINGS

Courses taken for college credit may be applied toward a certificate or an Associate in Arts degree.

Courses numbered under 100 are not intended for transfer credit.

R OT 50 Optical Technology I (8)
6 hours lecture-6 hours laboratory

Note: Graded only
 Basic theory of light and optics; anatomy and function of the eye; spectacle frame and lens design and fabrication; tools of the trade; and dispensing skills for optical technicians.

R OT 55 Optical Technology II (8)
6 hours lecture-6 hours laboratory

Prerequisite: R OT 50
Note: Graded only
 In-depth study of anatomy and function of the eye. Advanced theories of light, lenses, mirrors, and optics. Specialized dispensing skills. Topic preparation for the American Board of Opticianry (ABO) certification exams.

R OT 60 Specialized Ophthalmic Procedures (3)
6 hours lecture/laboratory

Prerequisite: R OT 55
Note: Graded only
 Specialized procedures in the ophthalmic industry including keratometry and biomicroscopy; ocular metabolism and related conditions; ocular solutions and pharmaceuticals; and contact lens fitting, ordering, and dispensing.

R OT 70 Ophthalmic Medical Assisting I (2)
4 hours lecture/laboratory

Prerequisite: R OT 50
Note: Graded only
 Introduction to assisting in the ophthalmic medical environment. Topics include ophthalmic exam, ophthalmic drugs, structure, function and common diseases of the eye and related tissues, optics and refraction, ocular motility and visual fields. Course content aligns with national certification standards for Certified Ophthalmic Assistant (COA) as set forth by the Joint Commission on Allied Health Personnel in Ophthalmology (JCAHPO).

R OT 75 Ophthalmic Medical Assisting II (2)
4 hours lecture/laboratory

Prerequisite: R OT 70
Note: Graded only
 Intermediate-level training in the ophthalmic health field. Includes keratometry, topography, refractometry, retinoscopy, slit lamp examination, tonometry, visual field testing, ultra-sound A-Scan measurements, intraocular implant calculations and ultra-sound B-Scan examination. Course content aligns with national certification standards for Certified Ophthalmic Technician (COT) as set forth by the Joint Commission on Allied Health Personnel in Ophthalmology (JCAHPO).

R OT 97 Optical 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: Graded only; may be taken 4 times
 Topics in Optical Technology. See Class Schedule for specific topic offered. Course title will designate subject covered.

Upholstery (R UP)

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**Automotive Upholstery**

Prepares students for employment in a variety of specialized areas of upholstery including automobiles, trucks, recreational vehicles and watercraft. Students will master skills and

techniques specific to each area of interest.

In order to earn a certificate, students must achieve a minimum grade of "C" in each of the certificate program courses.

Certificate of Proficiency

Program Requirements		Units
R UP 85	Basic Upholstery	4
R UP/R AT 90	Automotive Upholstery	4
TOTAL UNITS		8

Upholstery

Prepares students for variety of positions in upholstery and related industries. Students will master skills and techniques required for furniture upholstery and accessories, antique restoration, custom draperies and window treatments.

In order to earn a certificate, students must achieve a minimum grade of "C" in each of the certificate program courses.

Certificate of Proficiency

Program Requirements		Units
R UP 85	Basic Upholstery	4
R UP 86	Advanced Upholstery	4
R UP 95	Window Treatments	1.5
R UP 96	Decorator Accessories	1.5
TOTAL UNITS		11

COURSE OFFERINGS

Courses taken for college credit may be applied toward a certificate or an Associate in Arts degree.

Courses numbered under 100 are not intended for transfer credit.

R UP 75 Introduction to Upholstery (2)

4 hours lecture/laboratory
 Introduction to upholstery skills and techniques. Includes fabric selection, measurement, layout and other considerations. Students will complete an individual project (chair) using commercial sewing machines, cushion stuffer, pneumatic and hand tools. Cost estimating and other functions essential to a successful business venture will be discussed.

R UP 85 Basic Upholstery (4)

8 hours lecture/laboratory
Note: Graded only; may be taken 2 times
 Upholstering or replacing existing upholstery for various types of furniture. Commercial sewing machines, cushion stuffer, pneumatic tools, and hand tools will be used to complete individual projects.

R UP 86 Advanced Upholstery (4)

8 hours lecture/laboratory
Recommended preparation: R UP 85
Note: Graded only; may be taken 2 times
 Advanced upholstery principles and techniques. Power sewing equipment, pneumatic tools, and specialized hand tools will be used to complete complex upholstery projects. Includes estimating, customer relations, tax laws, and other fundamentals of upholstery business operation.

R UP 90 Automotive Upholstery (4)

8 hours lecture/laboratory
Note: Cross listed as R AT 90; graded only; may be taken 2 times
 Skills and techniques required to replace, repair or customize automotive and related upholstery. Fabrication of interiors and accessories for automobile interiors, watercraft and other recreational vehicles. Techniques and considerations related to auto alarm or sound system installation. Students will complete individual or group projects.

R UP 95 Window Treatments (1.5)*3 hours lecture/laboratory***Note:** Graded only

Design and fabrication of various window treatments. Includes industry standards, design and fabric options, measuring and estimating, and related business concepts. Students will complete sample projects.

R UP 96 Decorator Accessories (1.5)*3 hours lecture/laboratory***Note:** Graded only

Skills and techniques necessary for creation of a variety of decorator accessories: upholstered headboards; designer cushions; custom pillows; lampshades; duvet covers, bedspreads and dust ruffles; table runners and covers; and simple slipcovers. Includes design and fabric/materials selection, industry standards, cost estimating/pricing and other business considerations. Students will complete individual projects.

R UP 97 Upholstery 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: Graded only; may be taken 4 times

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

Community Education

Life Long Learning

Community Education fulfills the mandate to California's Community Colleges to provide noncredit courses designed to meet the special needs and capabilities of those students who do not desire or need to obtain unit credit. These courses provide remedial, developmental, occupational and other general educational opportunities as may be deemed necessary to provide for the civic and liberal education of the citizens of the community. All classes are taught by credentialed instructors. The program is offered by Occupational & Noncredit Programs within the Division of Career, Technical, and Extended Education Division.

The State has defined the following nine specific categories for funding: programs for the older adult, English as a second language, citizenship for immigrants, programs for substantially handicapped persons, parenting classes, remedial academic courses for elementary or secondary basic skills, short term vocational programs, educational programs for home economics, and courses for health and safety education.

To make the classes and programs more accessible, classes are offered throughout the district in community and senior centers, museums, parks, libraries, banks, churches, convalescent hospitals, as well as at the San Marcos campus, the Escondido Center, and seven Palomar College education sites.

The classes may vary in length from four weeks to seventeen weeks. Although some classes are tailored for a specific student constituency, all classes are open to the public. No enrollment fees are charged for the noncredit classes; however, all students are subject to the current accident fee, and where applicable, the current health and parking fees. Not all classes are offered each semester.

Contact the Occupational & Noncredit Programs at (760) 744-1150, ext. 2155 or 2286 for further information and registration procedures.

500	Music and Movement
534	Stitchery
590	Watercolor
591	Watercolor Techniques
600	40-Hour HAZWOPER Certification
601	Basic Blueprint Reading
602	Storm Water Regulations and Management
604	P.C. 832 Arrest and Control
637	Supervised Tutoring
646	Learning Skills - Handicapped
657	Independent Living Skills
665	Drawing With Colored Pencils
700	Tai Chi
701	Glazing Techniques
702	Mixed Media Drawing

For Customer Service Academy, noncredit certificate program, see next page.

COURSE OFFERINGS

75	Be Alive – Exercise
80	Personal Protection and Self-Defense
100	Solve Problems with Your Children
105	Basic Tutoring Training
155	Creative Retirement
165	Current and Newsworthy
175	Drawing, Beginning (Portrait)
201	Literacy/Adult Basic Education
205	Experimental Arts/Mixed Media
206	Exploring North County
230	Folk Medicine/Herbology
270	Hatha Yoga
300	Basic ESL
301	Beginning ESL I
302	Beginning ESL II
303	Beginning ESL III
304	Intermediate ESL I
305	Intermediate ESL II
306	Intermediate ESL III
395	Oil Painting
400	Citizenship
435	Portrait Painting
437	Portrait/Figure Drawing and Painting
439	Preparation for Childbirth
441	Quilting
495	So You Want to Write

Customer Service Academy (CSA)

Contact Occupational & Noncredit Programs for further information, (760) 744-1150, ext. 2284.

Customer Service Academy

The Customer Service Academy is a 10-module 60-hour course of instruction. Following are the 10 modules, each have six hours of instruction on the listed topics.

Non-credit courses required for a Certificate of Completion.

- 40 Customer Service
- 41 Communication
- 42 Team Building
- 43 Time Management
- 44 Stress Management
- 45 Conflict Management
- 46 Workplace Attitudes
- 47 Managing Organizational Change
- 48 Decision Making and Problem Solving
- 49 Ethics and Values

CSA 40 Customer Service

6 hours lecture

Note: May be taken 4 times

Designed to provide students with key skills and attitudes needed to effectively meet the needs of customers. Students will be introduced to the concept of internal and external customers, customer satisfaction, and customer retention. Topics will also include communicating with customers, developing a positive attitude, handling complaints, and sales skills.

CSA 41 Communication

6 hours lecture

Note: May be taken 4 times

Designed to introduce students to key elements of communication within business organizations. Topics will include verbal and nonverbal communication, listening skills, and specific supervisory communication skills.

CSA 42 Team Building

6 hours lecture

Note: May be taken 4 times

Designed to provide the student with an understanding of how teams work together, common problems teams encounter and how to solve them. Students will learn to recognize various team-player styles. Students will be introduced to team building in the workplace.

CSA 43 Time Management

6 hours lecture

Note: May be taken 4 times

Designed to introduce students to time management principles and specific tools to assist in making maximum use of time. Basic concepts of organizing for maximum time management will also be covered.

CSA 44 Stress Management

6 hours lecture

Note: May be taken 4 times

Designed to acquaint students with the skills that a supervisor needs to assist employees in managing stress. Topics included are stress recognition, recognizing job burnout, and some commonly used methods of assisting employees with these issues.

CSA 45 Conflict Management

6 hours lecture

Note: May be taken 4 times

Designed to provide students with an analysis of attitudes and behaviors which create conflict between individuals and groups within an organization. Topics include identifying and managing conflict, strategies for resolving conflicts, and tips for mediating workplace conflict.

CSA 46 Workplace Attitudes

6 hours lecture

Note: May be taken 4 times

Designed to provide students with key skills to effectively maintain a positive attitude in the workplace and at home. Students will be introduced to the concepts of how attitudes are communicated, the three types of attitudes, and how to adjust one's attitude. Topics will also include the primary causes of a bad attitude, turnaround strategies to battle bad attitudes, and specific techniques to raise the attitudes of others.

CSA 47 Managing Organizational Change

6 hours lecture

Note: May be taken 4 times

Designed to provide students with an understanding of change and the influence it has on an organization and the individuals in an organization. Topics will include understanding organizational change, theoretical models of change, stages of change, and how to manage organizational change.

CSA 48 Decision Making and Problem Solving

6 hours lecture

Note: May be taken 4 times

Designed to introduce students to decision making and problem solving as a supervisor.

CSA 49 Ethics and Values

6 hours lecture

Note: May be taken 4 times

Designed to acquaint students with the importance of values and ethics in the workplace. Emphasis will be placed on how values influence actions, how to develop a personal ethical philosophy, and how to assist others in developing positive ethics and values.

2004-05 Distinguished Faculty Award for Excellence in Teaching

RECIPIENTS



David Lowenkron (FT)
Mathematics



Andrea Ferentinos (ADJ)
Sociology

FINALISTS



Bob Sheppard (FT)
Cinema



Pat Hahn (FT)
Radio & TV



Chantal Maher (FT)
French



Roger Morrisette (FT)
Psychology



Ron Reed (ADJ)
English



Martha Velasco (ADJ)
Spanish

FT-Full Time ADJ-Adjunct

Academic Assignments

Note: In addition to the following list of full-time faculty, the Palomar College instructional programs are also supported by a great number of qualified Adjunct Faculty.

The year indicated after each employee's name is the year first appointed to the Palomar College staff.

Acevedo, Adelina, (2003) Dental Assisting

B.A., The Autonomous University of Baja California

Aegerter II, John (2000) Physical Education

B.S., University of Wyoming, M.Ed., Azusa Pacific University

Aguilera, Anna V (2004) Extended Opportunity Programs and Services

B.A., University of California, Irvine; M.S., California State University, Long Beach

Alderson, Gary D. (1976) Life Sciences

B.S., University of Redlands; M.A., University of California Santa Barbara; Ph.D., University of California, Santa Barbara

Alidaee, Bahram (2001) Mathematics

B.S., Roosevelt University, Chicago; M.S., California State University, San Marcos

Alperson, Jay R. (1977) Behavioral Sciences/ Library/Media Center

B.A., Oberlin College; M.A., University of Oregon; Ph.D., University of Oregon

Anderson, Yvonne (1989) Economics, History & Political Science

B.A., San Diego State University; M.A., Andrews University

Andre, Sandra (2004) Design and Consumer Education/Trade and Industry

A.A., Palomar College; B.A., San Diego State University, M.S., National University

Anfinson, Cynthia J. (1996) Mathematics

B.S., University of California, San Diego; M.S., Cornell University

Antoneccia, Rosa (2001) Counseling

B.A., California State University, Fullerton; M.A., San Diego State University

Arguello, Michael T. (1991) Academic Technology Resource Center; Economics, History & Political Science

B.A., St. Mary's College of California, Moraga; M.A., San Diego State University; Ph.D., Univ of California, San Diego

Armistead, Alba-Maria (1986) Business Education

A.A., Palomar College; B.S., San Diego State University; M.A. San Diego State University

Banta-Ford, Margaret A. (2002) Communications

B.S., San Diego State University

Barkley, Christine (1988) English

A.B., San Diego State College; M.A., San Diego State University

Barnaba, Ruth (1998) Tutorial Services

B.A., University of California, San Diego; M.A., United States International University

Barr, Rebecca A. (1986) Counseling and Matriculation

B.A., Scripps College; M.S., San Diego State University; Ph.D., Claremont Graduate School

Barrett, Kevin (1992) Public Safety Programs

A.S., Westchester Community College; B.S., Iona College; M.A., John Jay College of Criminal Justice, CUNY

Barry, Robert (1989) Communications

B.A., San Francisco State University; M.A., San Francisco State University

Barton, Michelle A. (2002) Institutional Research and Planning

B.A., San Diego State University; M.S., San Diego State University

Bealo, Mark J. (2001) Graphic Communications

A.A., Palomar Community College; B.A., California State University, San Marcos

Bean, Norma M. (2000) Palomar College Escondido Center

B.A. Brigham Young Univ; M.A., Brigham Young University

Bell, Andrea (1992) English

B.A., University of Wisconsin; M.A., Hunter College; Ph.D., CUNY Graduate Center

Bertram, Steven L. (1994) Trade and Industry

A.B., San Diego State University; M.A., San Diego State University

Bishop, Bruce E. (1977) Student Affairs

B.A., San Diego State University; M.A., San Diego State University

Bowman, Peter J. (2004) Economics, History & Political Science

B.A., University of California, San Diego; M.A., Arkansas State University

Boyajian, David A. (1981) Chemistry

B.S., California State University, Fresno; M.S., California State University, Fresno

Boyd, David H. (1976) Performing Arts

B.A., San Francisco State University; M.A., San Francisco State University

Brandon, Patricia A. (2004) Chemistry

B.S., California State University, Hayward; M.S., California State University, Fullerton

Brannick, Monika (1995) Mathematics

B.A., San Diego State University; M.A., San Diego State University

Burgher, Ronald (2002) Computer Science and Information Systems

A.S., Arapahoe Community College, Colorado; B.S., Colorado State University; M. S., National University; Ph.D., University of Iowa

Byrne, Madelyn (2000) Performing Arts

B.A., State University of New York, Stony Brook; M.A. Brooklyn College; D.M., City University of New York

Canon, Terrie (2000) Computer Science and Information Systems

B.S., University of California, Santa Barbara

Carpenter, A. Carey (1997) Life Sciences

B.S., University of California, Riverside; Ph.D., University of California, Berkeley

Carrillo, Melinda E. (1978) Reading Services

B.A., California State University, Long Beach; M.A., California State University, Fullerton

Cassoni, Mary (2004) Business Education

B.A., Boston University; M.B.A., San Diego State University

Cater, Judy Jerstad (1975) Library/Media Center

A.B., Mt. Holyoke College; M.S., Simmons College; M.A., University of San Diego

Cecere, Rosemarie L. (2001) Communications

B.A., University of California, San Diego

Chamberlin, Craig S. (2001) Mathematics

B.S., Northern Arizona University; M.S., Northern Arizona University

Chakkanakuzhi, Mathews T. (1995) Mathematics

B.S., California State University, Los Angeles; M.S., California State University, Los Angeles

Chase, David A. (1974) Performing Arts

B.M., The Ohio State University; M.A., The Ohio State University; D.M.A., The University of Michigan

Chen, Lihe (1997) English as a Second Language

B.A., Xiamen University; M.A., University of Arizona

Ciurczak, Alexis K. (1975) Library/Media Center

B.A., University of California, Los Angeles; M.A., San Jose State University; Certificate in Teaching English as a Second Language, University of California, Irvine

Clark, Mark D. (1996) Mathematics

B.S., California State University, Long Beach; M.S., California State University, Long Beach

Clegg, Daniel K. (1995) Mathematics

B.A., California State University, Fullerton; M.A., University of California, Los Angeles

Clyne, Kathleen G. (1988) Nursing Education

B.S.N., University of San Diego; M.N., University of California, Los Angeles

Cnossen, Jon (1977) Physical Education/Athletics

B.A., Stanislaus State College; M.A., United States International University

Conway, M. Jayne (1990) Health Services

B.S., St. Xavier College; M.S., St. Xavier College

Copeland, Molly L. (2003) Child Development Center**Corpora, Angelo J. (1990) Business Education**

A.A., College of DuPage; B.A., Lewis University; M.A., Antioch University - Antioch School of Law

Cosentino, Donna D. (2004) Communications

A.A., Palomar College

Cox-Romain, Lisa (1997) Counseling; International Education

B.A., California State University, Northridge; M.Ed., University of San Diego; M.S., California School of Professional Psychology; Los Angeles; Ph.D., California School of Professional Psychology, Los Angeles

Craw, Lorene E. (2003) Child Development Center

A.A., Imperial Valley College; Child Development Permit

Crouthamel, Steven J. (1976) American Indian Studies

B.A., University of the Pacific; M.A., University of North Carolina

Crowe, Judy Ann (1980) Nursing Education

B.S., University of Nevada; M.S., University of Texas

Cuaron, Berta C. (2003) Vice President, Instruction

B.A., California State University, San Bernardino; M.A., Northern Arizona University

Cunningham, April. (2004) Library/Media Center

B.A., University of California, San Diego; M.A., University of California, Los Angeles

Davis, Haydn N. (1981) Behavioral Sciences

B.A., University of Washington; M.A., San Diego State University; Ph.D., United States International University, San Diego

deBarros, Philip L. (1994) Behavioral Sciences

A.B., Stanford University; A.M., Stanford University; M.A., University of California, Los Angeles; Ph.D., University of

California, Los Angeles

Deen, Patricia (1991) Earth Sciences

B.S., California Lutheran College; M.S., San Diego State University

DeMaris, Patricia J. (1988) Counseling

B.A., Rutgers University/Douglas College; M.S., San Diego State University

Dise, L. John (1972) Counseling

B.A., California State University, San Francisco, M.A., California State University, San Francisco

Dixon, Patricia Ann (1971) American Indian Studies

B.A., University of California, San Diego; M.A., University of California, San Diego

Dolan, Judith L. (1981) Business Education

B.E., Wisconsin State University, M.A.E., Pepperdine University

Dowd, Bonnie Ann (1990) Business Education

B.B.A., University of Houston; M.B.A., National University, San Diego; Ph.D., University of San Diego

Dozier, Deborah S. (2001) American Indian Studies

A.B., San Diego State University; M.F.A., Syracuse University; M.A., University of California, Riverside; Ph.D., University of California, Riverside

Drinan, Mary Ann (1990) Economics, History & Political Science

B.A., Clarke College; M.S., Fort Hays Kansas State University

Dudik, Linda D. (1975) Economics, History & Political Science

B.A., Marymount College; M.A. equivalent, University of California, Santa Barbara; Ph.D., University of California, Santa Barbara

Durrant, George D. (1971) Art

B.A., San Diego State University; M.A., San Diego State University

Duvall, James E. (1988) R.O.P.

Certification, West Valley Occupational Center

Early, Daniel F. (2004) Physical Education/Athletics

A.A., Palomar College; B.A., California State University Long Beach; M.Ed., Azusa Pacific University

Early, Joseph D. (1996) Physical Education/Athletics

B.S., San Diego State University; M.Ed., Azusa Pacific University

Eckhart, Judith G. (1994) Nursing Education

B.S., Wichita State University, Kansas; M.S., California State University, Los Angeles; Ed.D., University of San Diego

Egkan, Theresa H. (1995) Counseling

B.A., California State University, Fullerton; M.S., University of LaVerne

Eldridge, Mark W. (1984) Physical Education/Athletics

B.A., Long Beach State College; M.A., United States International University

Erickson, John R. (1980) Foreign Languages

A.B., San Diego State University; M.A., San Diego State University; M.A., San Diego State University

Esteban, Jose (1989) Economics, History & Political Science

B.A., California State University, Fullerton; M.A., California State University, Fullerton; M.A., San Diego State University

Evans, Martha K. (1976) Foreign Languages

B.A., California Western University; M.A., San Diego State University

Farrelly, Joseph R. (1973) Computer Science and Information Systems

B.S., San Diego State University; M.S., San Diego State University; C.D.P., Institute for Certification of Computer Professionals

Faulkner, Margaret M. (2002) Performing Arts

B.F.A., University of Arizona; M.F.A., University of Iowa

Feddersohn, Richard C. (1985) Trade and Industry

A.A., Mt. San Antonio College; B.A., California State University, Long Beach

Fererro, Jennifer (2004) Child Development

B.A., University of Colorado; M.S., San Diego State University

Ferges, Ralph E. (1980) Life Sciences

B.S., University of California, Davis; M.A., California State University, Fresno

Fernandez, Jose J. (1997) Counseling

B.A., Willamette Univ; M.S., Western Oregon State College

Filbeck, Russell C. (1997) Trade and Industry

A.A., Palomar Community College; A.B., San Diego State University; M.A., San Diego State University

Finkenthal, Daniel F. (1997) Physics and Engineering

B.S., University of Lowell; Ph.D., University of California, Berkeley

Finton, Michael (1999) Emergency Medical Education

A.N.D., Santa Ana College

Fish, Judith (1996) R.O.P.

B.A., National University; M.A., National University

Flanagan, Chantal M. (2003) Nursing Education

B.S.N., Trenton State College; M.S., University of California, San Francisco

Forsyth, David T. (1981) Business Education

B.B.A., North Texas State; M.B.A., San Jose State; M.A., National University; M.P.A., Jacksonville State University

Fowler, Grace (2000) Graphic Communications

B.M.E., Friends University; M.S., National University

Francis, Candice A. (1973) Life Sciences

B.A., University of California, Riverside; M.S., University of Houston; Ed.D., University of San Diego

Fried, Bruce J. (1991) Emergency Medical Education

B.S., California State College at Long Beach

Fukunaga, Kristeen T. (1975) Chemistry

B.S., University of California, Los Angeles; M.S., San Diego State University

Furch, Martha J. (1996) English as a Second Language

B.A., Northern Illinois University; M.A., Univ of New Mexico

Gach, Peter F. (1981) Performing Arts

B.S., Indiana University; M.M., Indiana University; D.M.A., University of Arizona

Gage, Maura A. (1981) Life Sciences

B.S., Towson State College; M.S., University of Minnesota; Ph.D., University of Minnesota

Galli, Nancy J. (1979) Design and Consumer Education

B.A., California State University, Long Beach; M.A., California State University, Long Beach

Galloway, Lois (1986) Extended Opportunity Programs and Services

B.A., University of San Diego; M.A., University of San Diego

Gan, Bruce (1999) R.O.P.

Vocational Credential

Gardner, Beverly M. (1981) Counseling and Matriculation

B.A., Southern Illinois University; M.S., Southern Illinois University

Garlow, Kathryn K. (1974) Dean, Languages and Literature

A.A., Palomar College; B.A., Whittier College; M.A., San Diego State University; Ph.D., Claremont Graduate University

Garzon, Luz E. (1974) Multicultural Studies, Foreign Languages

A.A., Southwestern College; B.A., San Diego State University; M.A., equivalent, University of California, San Diego; Ph.D., University of California, San Diego

Gavin, Calvin One Deer (2000) Grant Funded Student Support Programs

B.A., Illinois State University; M.A., University of Phoenix

Geetha, Natarajan (1995) Chemistry

B.S., Madurai Kamaraj University; M.S., Madurai Kamaraj University; Ph.D., Indian Institute of Technology

Gerhardt, Hugh E. (1997) Physical Education/Athletics

A.A., Foothill Community College; B.S., Cal Poly State University, San Luis Obispo; M.S., Cal Poly State University, San Luis Obispo

Gilardi, James L. (1996) Life Sciences

B.S., San Diego State University; M.S., San Diego State University; M.B.A., San Diego State University

Gill, Perri L. (2004) Mathematics

A.A., Mesa College; B.A., Loma Linda University; M.A., San Diego State University

Gilson, Robert (1973) Performing Arts

B.A., California State College, Los Angeles; M.M., Indiana University

Goldsmith, Sherry L. (2000) Disability Resource Center

B.A., National University; M.A., National University

Gomez, Carlos A. (1976) Foreign Languages

Instituto Americano, Paraguay

Gomez, Gladys (1995) Foreign Languages

B.A., Escuela Normal de Profesores, Paraguay; M.A., Universidad Catolica, Paraguay

Gordon, Sherry L. (1991) Business Education

B.A., Brooklyn College; M.A., Brooklyn College; M.A., University of Southern California, Los Angeles

Gowen, Brent D. (1992) English

B.A., University of California, San Diego; M.A., San Diego State University; Ph.D., University of California, San Diego

Graham, Loretta G. (1979) Design and Consumer Education

B.A., San Diego State Univ; M.S., San Diego State University

Green, Nicholas R. (2002) Computer Science and Information Systems

A.A., Coconino County Community College; B.A., California State University, San Marcos

Grenz, Suzanna M. (2001) Economics, History & Political Science

B.A., University of California, Riverside; M.A., University of California, Riverside; M.B.A., National University; Ph.D., University of Missouri

Guerra, R. Anthony (1974) Multicultural Studies; Behavioral Sciences

A.A., Reedley College; B.A., Chico State College; M.A., Chico State College

Gullette, William T. (1982) Communications

A.B., San Diego State University; M.A., San Diego State University

Hahn, Patrick J. (2001) Communications

B.B.A., National University

Haines, Ronald R. (1976) Disability Resource Center

A.A., Cuesta College; B.A., California State University, Fresno, M.A., California State University, Fresno

Halttunen, Lynda G. (1988) Dean, Counseling and Matriculation

B.S., Cornell University; M.A., United States International University

Hawkins, William A. (1977) Performing Arts

B.A., Louisiana State University; M.A., North Texas State University

Heinz, Bettina (1990) Chemistry

B.S., Goethe University of Frankfurt, Germany; M.S., Goethe University of Frankfurt, Germany; Ph.D., Goethe University of Frankfurt, Germany

Henson, Lynne M. (1990) English as a Second Language

B.A., California State University, Long Beach; M.A., California State University, Long Beach; Ph.D., Indiana University of Pennsylvania

Hernandez, Timothy M. (1997) Counseling

B.A., University of California, Santa Cruz; M.A., San Diego State University

Hewitt, Nicole (1999) Child Development Center

Child Development Master Teacher Permit

Hill, Shelton K. (1997) Speech Communication/Forensics/ASL

B.A., Point Loma Nazarene College; M.A., California State University, Fullerton

Hoevertsz, James (1999) R.O.P.

Vocational Credential

Hoffman, Janet (1990) Camp Pendleton Education Center

B.S., St. Cloud State University; M.A., Webster University; M.A., San Diego State University

Hohman, Barbara Anne (1991) English

B.A., San Jose State University; M.A., San Jose State University

Hokett, Dewi D. (2001) Speech Communication/Forensics/ASL

B.A., California Baptist University; M.A., California State University, Fullerton

Houser, Jerry L. (1982) Earth Sciences

B.S., Metropolitan State College; M.Ed., San Diego State University

Hudelson, Mark J. (1997) Art

B.A., University of California, Irvine; M.A., San Diego State University

Huffman, Karen R. (1980) Behavioral Sciences

A.B., San Diego State University; M.S., San Diego State University

Humphrey, Terry L. (1976) Behavioral Sciences

B.A., San Diego State University; M.A., San Diego State University

Huskey, Karan K. (2001) Counseling and Matriculation

B.S., San Diego State University; M.Ed., University of San Diego

Ingham, Charles A. (1991) English

B.A., University of Essex, England; M.Phil., University of Essex, England

Isaacs, Richard M. (1991) R.O.P.

Auto Body Credential

Jahnel, William B. (2001) Economics, History & Political Science

B.A., Austin College; M.A., Rice University

Jain, Catherine (2000) Earth Sciences

B.S., California Polytechnic State University; M.A., San Diego State University

Japtok, Martin (2004) English

Ph.D., University of California, Davis

Jenkins, Jerry R. (2002) English

B.A., University of California, San Diego; M.A., University of California, San Diego

Johnson, Christopher S. (1992) Economics, History & Political Science

B.A., California State University, Fresno; M.A., University of California, Santa Barbara; Ph.D., University of California, Riverside

Jones, Gayle (2004) Child Development Center

A.A., National University; M.A., National University

Jones, Robert N. (1997) Mathematics

A.A., Palomar College

Kang, Byung I. (1990) Library/Media Center

B.A., Ewha Womans University-Seoul, Korea; M.L.S., University of Oregon

Keinath, Pamela (2002) Child Development Center

B.A., San Jose State University

Kelber, Barbara N. (1994) English

B.A., University of San Diego; M.A., University of California, Riverside; Ph.D., University of California, Riverside

Kerckhove, Lee F. (1997) Behavioral Sciences

B.A., University of California, San Diego; M.A., Loyola University; Ph.D., Loyola University

Kerkhoff, Gloria (2000) Counseling and Articulation

B.S., St. Mary of the Plains, Dodge City, KS; M.Ed., University of San Diego

Key, Douglas (1989) Earth Sciences

A.B., San Diego State University; M.A., San Diego State University

Kirk, Charles E. (1989) R.O.P.

Vocational Credential

Lahijani Roya S. (2001) Life Sciences

B.S., University of Oklahoma, M.S., University of Oklahoma, Ph.D., University of Nevada, Reno

Lane, Mark R. (1997) Earth Sciences

B.A., San Diego State University; M.S., San Diego State University

Laughlin, Teresa L.C. (1995) Economics, History & Political Science

B.A., University of California, Berkeley; M.A., California State University, Fullerton

Lee, Herman C. (1972) Enrollment Services

B.A., San Francisco State College; M.S., California State College, Los Angeles; M.B.A., National University

Lee, Loren A. (1980) Economics, History & Political Science

B.S., University of California, Berkeley; M.A., University of Washington; M.S., San Diego State University

Lesser, Jo-Anne (2000) Counseling

B.B.A., National University; M.S., San Diego State University

Lesyna, Kalyna K. (2001) Behavioral Sciences

B.A., San Diego State University; M.A., University of California, San Diego

Levine, Frederick S. (1994) Art

B.A., New York University; M.A., Washington University, St. Louis; Ph.D., Washington University, St. Louis

Levy, Stanley A. (1973) Reading Services

A.A., Los Angeles Valley College; B.A., San Diego State University; M.A., United States International University

Lienhart, Shannon L. (1991) Mathematics

B.S., San Diego State University; M.A., San Diego State University

Lockett, David M. (1990) Behavioral Sciences

B.A., University of Hawaii-Hilo; M.A., University of Hawaii-Manoa; Ph.D., University of Hawaii

Locklear, Linda R. (1975) American Indian Studies

B.A., San Diego State University; M.S., San Diego State University

Lofthouse, Carlton J. (2004) Public Safety Programs

A.A., American River College

Lowenkron, David A. (1989) Mathematics

A.A., Los Angeles City College; B.A., California State College, Los Angeles; M.A., University of Southern California, Los Angeles

Lowry, Christopher R. (2001) Speech Communication/Forensics/ASL

A.A. Orange Coast College; B.S., Bradley University; M.A., Ball State University

Lowther, Carolyn (1999) English as a Second Language

B.A., Michigan State University; M.A., San Diego State University

Luettringhaus, Srisuda (1999) Child Development Center

B.E., Chulalongkorn University, Bangkok Thailand; M.A., University of New Mexico

Lugo, Anthony J. (1974) Art

B.A., California State College, Long Beach; M.A., California State College, Long Beach

Luna, James A. (1986) Counseling and Matriculation

B.A., University of California, Irvine; M.S., San Diego State University

Lutz, Dennis C. (1990) Design and Consumer Education

B.A., San Diego State University; M.A., San Diego State University

Madan, Nimoli (1997) English as a Second Language

B.A., University of Bombay, India; M.A., University of Bombay, India; M.A., San Jose State University

Madrigal, Joseph L. (1996) Vice President, Student Services

B.A., Chico State College; M.A., Harvard University

Maher, Chantal R. (2001) Foreign Languages

A.A., Olaloosa Walton Junior College; B.A., University of Nevada, Las Vegas; M.A., University of Nevada, Las Vegas

Maioff, E. Ann (1971) English

B.A., Pitzer College; M.A., University of Denver; Ph.D., University of California, Irvine

Mancao, Ronald C. (2001) Physical Education/Athletics

A.B., San Diego State University; M.A., San Diego State University

Martin-Klement, L. Jackie (1997) R.O.P.

B.A., Bowling Green State University; M.A., Bowling Green State University

Martinez, Martha (1996) Mathematics

A.A., Palomar College; B.S., California State University, San Marcos; M.S., California State University, San Marcos

Maunu, Leanne M. (2002) English

B.A., University of California, San Diego; M.A. Indiana University; Ph.D., Indiana University

McAdams, James E. (1992) Physical Education/Athletics

B.S., California State University, Fullerton

McClellan-Brewer, Laura B (2004) Child Development Center

A.A.S., William Rainey Harper College

McDonald, Stephen B. (1984) English

A.B., Occidental College; M.A., University of California, Riverside

McDonough, Bruce A. (1974) Cooperative Education

A.S., Mitchell College, Connecticut; B.S., Central Connecticut State College; M.S., Central Connecticut State College

McDonough, Pamela (1990) English

A.B., San Diego State University; M.A., San Francisco State University

McFarland, Teri A. (1975) Physical Education/Athletics

B.A., San Diego State University; M.A., San Diego State University

McGinnis, William E. (1985) Computer Science and Information Systems

B.S., Coleman College; B.S., United States Naval Academy; B.S., Manhattan College; M.S., University of Illinois

McGurk, Karen (1999) Nursing Education

B.S., C.W. Post Center, L.I.U.; M.N., Wichita State University

McLellan, Kevin F. (1990) Speech Communication/Forensics/ASL

American Sign Language Credential

Mead, Patriceann J. (1997) Performing Arts

B.S., State University of New York, Brockport; M.A., State University of New York, Brockport

Meek, Katharina A. (1999) Art

B.F.A., Art Center College of Design

Metzger, Wendy R. (1988) Mathematics

A.B., San Diego State University; M.S., San Diego State University; M.S., Rensselaer, New York

Mifflin, Karen L. (2001) Mathematics

B.S., University of California, Riverside; M.S., University of California, Riverside

Miller, Jay (1994) Trade and Industry

B.V.E., California State University, San Bernardino

Miller, Karen E. (2003) Child Development Center

A.A., San Bernardino Valley College; Children's Center Permit; Site Supervisor Permit

Miller, Maria S. (1985) Counseling

B.A., Kent State University; M.Ed. Kent State University; M.A., United States International University

Miller, Robert (1990) Behavioral Sciences

A.B., San Diego State University; M.A., San Diego State University

Miller, Susan A. (2002) Behavioral Sciences

A.A., Allan Hancock College; B.A., University of California, Berkeley; M.A., University of California, Davis; Ph.D., University of California, Davis

Mills, Jane L. (1986) Disability Resource Center

A.B., San Diego State University; M.A., San Diego State University

Mills, Patrick R. (1985) Speech Communication/Forensics/ASL

B.A., San Diego State University; M.A., San Diego State University; Ph.D., University of Colorado

Mitton, Carol A. (1980) Child Development Center

Child Center Permit

Mobilia, Anne-Marie (2001) Behavioral Sciences

B.A., University of California, Irvine; M.A., San Diego State University

Morrisette, Roger N. (2001) Behavioral Sciences

B.A., Plymouth State University; M.A., San Jose State University; Ph.D., University of California, Los Angeles

Mufson, Michael A. (1995) Performing Arts

B.A., Hampshire College, Amherst; M.F.A., University of California, Irvine

Madan, Nimoli (1997) English as a Second Language

B.A., University of Bombay, India; M.A., University of Bombay, India; M.A., San Jose State University

Mumford, Michael V. (1990) Mathematics

B.A., Humboldt State University; B.A., Humboldt State University; M.S., Colorado State University

Murcia, Ruben E. (1997) Life Sciences

B.S., State University of Montemorelos; M.S., San Diego State University

Musgrove, Susan P. (1991) Reading Services

B.A., California State University, Long Beach; M.S., California State University, Fullerton

Nakajima, Takashi (1990) Physics and Engineering

B.S., University of California, Santa Cruz; M.S., San Diego State University

Nebelsick-Tagg, Marilee K. (1986) Nursing Education

B.S., San Diego State University; M.S.N., University of California, Los Angeles

Nelson, Wendy (2000) Communications

B.S., Ohio University; M.S., San Diego State University

Newman, Marc T. (1991) Speech Communication/Forensics/ASL

B.A., Biola University-La Mirada, California; M.A., Louisiana State University, Baton Rouge; Ph.D., Regent University

Nguyen, Chuong (1990) Mathematics

B.S., Portland State University; M.S., Portland State University

Noble, Gilbert F. (1981) Business Education

B.S., California State University, Northridge; M.B.A., San Diego State University

Norton, Suzann M. (1990) Disability Resource Center

B.A., Michigan State University; M.A., San Diego State University

Nunez, Rosa Elvia (1990) Counseling

A.B., San Diego State University; M.S., San Diego State University

Oatman, Christine (1990) Art

B.A., Scripps College; M.F.A., Cranbrook Academy of Art, Michigan

Ober, Ingram S. (2004) Art

B.A., Eckerd College; M.F.A., Claremont Graduate University

O'Brien, Patrick J. (2001) Extended Opportunity Programs & Services

B.S., University of Texas, Austin; M.A., San Diego State University

O'Doherty, Fergal C. (1997) English

B.A., State University of New York, Stony Brook; Ph.D., City University of New York

O'Neil, Dennis H. (1975) Behavioral Sciences

B.A., California State University, Long Beach; Ph.D., University of California, Riverside

Ordille, Henry P. (2004) Emergency Medical Education

A.A., Atlantic Community College; B.A., Florida Atlantic College

Orton, Bruce I. (1990) English

B.A., University of Utah, Salt Lake City; M.A., San Diego State University

Owens, Wilma G. (1996) Dean, Career, Technical and Extended Education

B.S., Webster University; M.A., Alabama State College

Paes de Barros, Deborah R. (1994) English

B.A., University of California, Los Angeles; M.A., University of California, Irvine; Ph.D., University of California, Riverside

Panish, Jon (2000) English

B.A., University of Iowa; Ph.D., University of California, Irvine

Payn, Lillian S. (1997) Graphic Communications

B.A., University of Arizona; M.A., University of Arizona; M. Ed., Utah State University

Pearson-Lowe, Elizabeth A. (1997) Life Sciences

A.S., Victor Valley College; B.A., California State University, Fullerton; M.A., California State University, Fullerton

Peixoto, Eduardo J.C. (1974) Foreign Languages

B.A., St. Mary's College of California; M.A., Middlebury; ESL Certificate, University of California, Los Angeles

Perry, Stephen R. (2001) Computer Science and Information Systems

B.A., Illinois Institute of Technology; M.A., University of Phoenix

Pesavento, James P. (1975) Earth Sciences

B.A., San Diego State University; M.S., San Diego State University

Peterson, Morgan A. (1994) Public Safety Programs

B.A., Golden Gate University, San Francisco; M.S., Dominican College, San Rafael; Ed.D., University of San Francisco

Piche, Donald R. (1974) Behavioral Sciences

B.A., University of Missouri; M.A., Northern Illinois University

Pince, Nancy J. (2004) Nursing Education

B.S.N., Point Loma Nazarene University; M.S.N., Point Loma Nazarene University

Pistone, Walter R. (1991) Computer Science and Information Systems

B.A., California State Polytechnic College, Pomona; M.S., West Coast University, Los Angeles

Plotts, Thomas B. (1996) Public Safety Programs

B.P.A., National University; M.P.A., National University

Puchi, Frank (1989) Counseling

B.S., Loyola University; M.Ed., Loyola University; M.A., Loyola University

Rangel, Jose C. (1974) Multicultural Studies

A.A., San Joaquin Delta College; B.A., University of the Pacific; M.A., University of the Pacific

Reed, Barry C. (1977) Art

B.A., Humboldt State College; M.F.A., University of California, Santa Barbara

Roberts, Larry L. (1994) Public Safety Programs

B.A., California State College; Los Angeles; M.S., University of Southern California, Los Angeles; Ed.D., University of Southern Mississippi

Rollins, Wade (1999) Graphic Communications

B.A., California State University, San Marcos; M.A., San Diego State University

Rose, Fredric E. (2004) Behavioral Sciences

B.A., San Diego State University; M.A., University of Montana; Ph.D., University of Montana

Roth, Renee (1998) Financial Aid and Scholarships

B.A., New Mexico State University; M.S., National University

Rudy, Denise E. (2003) Dental Assisting

A.A., Mira Costa College

Ruzich, Margie L. (1977) Child Development

A.A., San Diego City College; B.A., San Diego State University; M.A., California State University, Sacramento

Saavedra, Jorge (1997) Mathematics

M.S., University of Iowa; Ph.D., University of Iowa

San Agustin, Mary S. (1995) Financial Aid and Scholarships

B.B.A., University of Guam; M.B.A., Golden Gate University, San Francisco

Sasse, Robert A. (2001) Child Development

B.A., Newark State College; M.A., Pacific Oaks College

Schaeffer, Joseph P. (1976) Trade and Industry/R.O.P.

Vocational Credential

Schultz, Jay T. (1990) Art

B.A., California State University, Long Beach

Schwerdtfeger, Patrick M. (1974) Dean, Arts, Media, Business and Computing Systems

B.S., Loyola University; M.A., California State, Northridge

Seech, Zachary P. (1980) Behavioral Sciences

B.A., Westminster College; M.A., Bowling Green State University; M.A., University of California, San Diego; Ph.D., University of California, San Diego

Seller, Karl (2004) Physical Education/Athletics

A.A., MiraCosta College; B.S., San Diego State University; M.Ed., Azusa Pacific University

Servatka, Barbara H. (2003) Nursing Education

B.S.N., University of San Diego; M.S., California State University, Dominguez Hills

Seward, Carol L. (2004) Child Development Center**Sheahan, Kathleen M. (2001) Foreign Languages**

B.A., California State University, San Marcos; M.A., San Diego State University

Sheppard, Robert (1982) Communications

A.B., Stanford; M.A., San Diego State University

Sivert, Shayla (1988) English as a Second Language

B.A., California State University, Fresno; M.A., California State University, Fresno

Smith, Anthony W. (1996) Computer Science and Information Systems

B.S., University of Manchester Institute of Science and Technology, England; Ph.D., Kingston Polytechnic, England

Smith, Carlton K. (1996) English

B.A., University of California, Riverside; M.A., San Diego State University; Ph.D., University of California, Riverside

Smith, Melissa B. (1997) Speech Communications/Forensics/ASL

A.A., Grossmont College; B.A., San Diego State University; M.A., University of California, San Diego

Smith, Mollie R. (1999) Occupational and Noncredit Programs

B.A., San Diego State University; M.S., San Diego State University

Snow, Susan R. (1996) Mathematics

B.S., State University of New York at Plattsburgh

Sosa, Gary (2004) English as a Second Language

B.A., California State University, Long Beach; M.A., Monterey Institute of International Studies

Sourbeer, Daniel B. (1992) Life Sciences

B.S., University of California, Davis; M.S., California State University, Long Beach

Spear, Steven G. (1973) Earth Sciences

B.A., Colorado College; M.S., University of Southern California; M.A., San Diego State University; Ph.D., University of California, Riverside

Squires, Annette D. (2002) Mathematics

B.S., California State University, Long Beach; M.A., California State University, Long Beach

Stachelek, Paul W. (1997) Communications

A.A.S., State University of New York, Canton; B.A., Eisenhower College, New York

Stafford, Judith (1990) English

B.A., Louisiana State University, Baton Rouge; M.A., Louisiana State University, Baton Rouge; M.F.A., Louisiana State University, Baton Rouge

Steffensmeier, Mari C. (2001) Counseling

B.A., Arizona State University; M.Ed., University of San Diego

Stegman, Richard L. (1991) Computer Science and Information Systems

B.A., University of Cincinnati; M.S., State University of New York, New Paltz; M.S. New York University, New York

Steirnagle, Michael F. (1990) Art

B.F.A., University of Texas at El Paso

Stevens, Rena V. (1988) Business Education

A.A., Palomar College; B.A., San Diego State College; M.B.A., San Diego State University

Stillier, Irene M. (1979) Nursing Education

B.S., Boston University; M.S., Boston University

Stone, Jon K. (2001) Trade and Industry

A.A., Palomar College; B.A., San Diego State University; M.A., United States International University

Struxness, Keven R. (2001) Speech Communication/Forensics/ASL

B.A., Gallaudet College; M.A., San Diego State University

Studinka, Diane C. (1995) Child Development

B.A., Humboldt State University; M.S., National University

Sugar, Anita (1989) R.O.P.

B.A., San Diego State University; M.B.A., National University

Swift, Kenneth E. (1983) Design and Consumer Education

B.S., University of Oklahoma

Tagg, John R. (1988) English

B.A., Loyola-Marymount University; M.A., California State University, Northridge

Tait-Brown, Ruth E. (1990) Disability Resource Center

A.B., San Diego State University; M.S., San Diego State University

Taupier, Andrea C. (1976) Life Sciences

A.A., El Camino College, R.N.

Tejeda, Cristina E. (1990) Design and Consumer Education

B.A., Pitzer College; M.F.A., San Diego State University

Thompson, Craig (2000) English

B.A., San Diego State University; B.A., University of California, Santa Barbara; M.A., University of California, San Diego; Ph.D., University of California, San Diego

Thompson, Sara L. (1995) Dean, Math, Natural and Health Sciences

B.S., San Diego State University; M.S., San Diego State University

Thomsen, Dave J. (1991) Trade and Industry

B.A., California State University, Long Beach

Thomson, Carla (2000) Reading Services

B.A., University of Texas; M.S., California State University, Fullerton

Tian, Yan (2004) Mathematics

B.A., Beijing Teacher's University; M.A., Indiana University

Titus, Sherry M. (1995) Physical Education/Athletics

B.A., Utah State University; M.A., Utah State University; M.A., National University

Torgison, Cynthia (2000) Mathematics

B.A., McPherson College; M.A., California State University, Dominguez Hills; M.S., San Diego State University

Towfiq, Fariheh (1990) Mathematics Learning Center

B.S., University of California, Irvine; M.A., California State University, Fullerton

Townsend-Merino, Katherine (1988) Behavioral Sciences

A.B., San Diego State University; M.A., University of California, Berkeley

Trujillo, Alan P. (1990) Earth Sciences

B.S., University of California, Davis; M.S., Northern Arizona University

Valdez, John E. (1972) Multicultural Studies

B.A., University of San Diego; M.A., University of California, San Diego; M.A., San Diego State University

Ventimiglia, Thomas (1999) Counseling

B.A., University of San Diego; M.A., San Diego State University

Vernoy, Mark W. (1976) Dean, Social and Behavioral Sciences

B.A., Occidental College; Ph.D., University of California, Irvine

Versaci, Rocco L. (1997) English

B.A., University of Illinois; M.A., Indiana University; Ph.D., Indiana University

Vetter, Robert C. (1981) Physical Education/Athletics

B.A., United States International University; M.A., United States International University

Voth, Anne (1990) Mathematics

B.G.S., University of Kansas; M.A., San Diego State University

Waite, Lori E. (1993) Disability Resource Center

B.S., California Polytechnic State University, San Luis Obispo; M.S., San Diego State University; Ed.D., University of San Diego

Walker, Mark E. (1985) Mathematics

A.A., Palomar College; B.A., San Diego State University; M.A., San Diego State University

Waterman, Patricia M. (1977) Physical Education/Athletics

B.A., San Diego State University; M.A., San Diego State University

Weintraub, Tamara S. (1997) Library/Media Center

B.A., University of California, San Diego; M.L.S., University of California, Los Angeles

Weldele, Colleen (1989) English as a Second Language

B.A., San Diego State University; M.A., San Diego State University

White, Steven (2000) Athletics

B.S., University of Utah; M.S., National University

Wiestling, Jay R. (1985) Mathematics

A.A., Palomar College; A.B., San Diego State University; M.S., California Polytechnic State University

Woods, April C. (1996) Counseling and Matriculation

B.A., San Diego State University; M.A., San Diego State University

Woods, John F. (1973) Athletics

B.S., California State Polytechnic College; M.A., California State Polytechnic College

Workman, Deborah (1989) Emergency Medical Education

R.N., Los Angeles County-USC Medical Center School of Nursing, Los Angeles; B.S., Chapman College

Wozniak, Stephen F. (1971) English

A.A., Palomar College; B.A., Harvard College; M.A., University of Virginia

Wright, Brenda (1999) Extended Opportunity Programs and Services

B.A., National University; M.A., National University

Wronski, Susan M. (1975) Child Development Center

A.A., Palomar College; A.B., San Diego State University

Yon, Lisa G. (1997) Earth Sciences

B.S., South Hampton College of Long Island; M.S., Brown University; Ph.D., Brown University

Young, Kathleen N (2004) Behavioral Sciences

B.A., University of Hawaii, Manoa; M.A., University of California, Los Angeles; Ph.D., University of California, Los Angeles

Zacharias, Gary (1990) English

A.B., San Diego State University; M.A., San Diego State University

Zabzdyr, Jennifer (2004) Chemistry

A.A., Pasadena City College; B.S., Cal Poly State University, San Luis Obispo; Ph.D., University of California, Riverside

Zolliker, Susan (2000) English

B.A., Michigan State University; M.A., San Diego State University

Emeriti

The years indicate first year appointed to the Palomar College staff and the year of retirement.

Administrative

Bergman, Virgil L.	1955-1979
Speech, Drama, and Dean	
Boggs, Dr. George R.	1985-2000
District Superintendent and President	
Burton, Robert L.	1957-1977
Dean of Student Personnel	
Chappie, Dr. David A.	1973-1996
Vice President, Student Services	
Huber, Dr. Frederick R.	1964-1977
District Superintendent and President	
Jackson, Gene M.	1965-2002
Dean of Arts and Languages Division	
Schettler, Dr. John D.	1956-1983
Vice President, Business Services	

Faculty

A

Ahrend, Justus W.	1964-1982
Photography	
Altmann, Esther Nesbin	1947-1977
Library and Dean	
Archer, Dr. Roy R.	1963-2003
Economics, History, and Political Science	
Armstrong, Wayne P.	1966-2003
Life Sciences	
Arnsan, Daniel C.	1980-2003
Library/Media Center	
Ashbrook, Vernon L. "Buddy"	1968-1993
Drama	
Aufmann, Richard N.	1972-2000
Mathematics	
Austin, George L.	1967-1990
Drafting	
Ayers, Mildred L.	1964-1984
Physical Education	

B

Backart, Dr. Kent E.	1962-1992
Chemistry/Aeronautics	
Baldwin, Russell W.	1965-1988
Art	
Barker, Vernon C.	1964-1990
Mathematics	
Barlow, John	1953-1977
Art	
Barnet, Harry N.	1975-1990
Chemistry	
Bedford, William L.	1961-1996
Physics and Engineering	
Bergman, Virgil L.	1955-1979
Speech, Drama, and Dean	

Bertram, Larry L.	1967-1994
Trades and Industry	
Bleth, Dorothe D.	1977-2000
Performing Arts	
Bliss, Harry E.	1967-1999
Art	
Boehm, Dwight	1958-1965
English and Dean	
Boehm, Louise K.	1981- 2005
Art	
Bowen, James T.	1973-2000
Student Affairs	
Bowman, Robert E.	1953-1981
Athletics	
Brink, Celia Ann	1972-1994
Social Sciences	
Brown, Walter F. L.	1970-1983
Vocational Education Dean	
Brubeck, Howard R.	1953-1970
Music, Humanities Dean	
Bruington, Neil E.	1979-2003
Graphic Communications	
Burke, Marilyn Crist	1965-1977
Spanish	
Burns, Dr. Kenneth D.	1977-1999
Counseling	
C	
Campbell, LaVere C.	1966-1984
Business	
Carli, Angelo	1964-1998
English	
Casey, Donnabelle Anne	1967-1984
Nursing Education	
Chambless, Dr. Beauford	1966-1983
Political Science	
Chittock, David H.	1970-1986
Counseling	
Clothier, Ruth E.	1971-1988
Child Development	
Coffman, Harold	1958-1964
Psychology	
Coleman, Dr. Robert F.	1969-1992
English	
Colwell, Ramona W.	1971-1995
Mathematics	
Coutts, Charles A.	1946-1974
Sciences, Mathematics, Dean	
Crouch, Stanley	1972-2002
PE/Athletics	
Cuevas, Aura A.	1972-1998
English	
Curran, Michael A.	1969-1988
Physical Education	
D	
Dahlin, Raymond D.	1965-1999
Speech/Communication	

Daniels, James M. 1988-2003
Mathematics

Davis, Rosemary R. 1974-1996
Child Development

Disparti, Nicholas 1965-1982
Wood Technology

Dixon, Horace H. 1974-1994
Business Education

Dolan, Thomas C. 1970-1986
Computer Science

Donahue, Warren D. 1959-1984
Mathematics

E

Eberhart, Judith E. 1973-2004
Counseling

Ebert, Robert R. 1967-2003
Life Sciences

Elliott, Fred L. 1960-1981
Life Sciences

Ellison, G. Vernon 1977-1994
Physical Education

F

Felton, James J. 1960-1990
Business

Flores, Adele G. 1978-2000
E.O.P. & S.

Freeman, Gary M. 1979-1999
Life Sciences

Fullerton, Robert E. 1963-1995
Mathematics

Fulton, Mary B. 1966-1976
Nursing Education

G

Giardina-Rodgers, Mary Anne 1986-2003
Child Development

Gibbs, O. Byron 1967-1997
Counseling, Tutoring

Gibson, M. Diane 1965-1999
English

Gilmour, Andrew D. 1969-1995
Athletics

Golden, Willie L. 1974-1990
Automotive Technology

Goodson, Dr. Hulda G. 1977-2000
Child Development

Gordon, Dr. Joseph F. 1962-1985
History

Grant, Patricia 1969-1989
English as a Second Language

Griffin, Susan A. 1979-1999
Nursing Education

Grisinger, Kenneth 1954-1966
History

Groschwitz, Edwin A. 1967-2003
Chemistry

Gruber, Abraham 1964-1994
Behavioral Sciences

Gunther, Dr. Margaret L. 1973-2002
Family and Consumer Sciences

H

Hafner, Janet R. 1973-1998
English as a Second Language

Hammond, James D. 1974-1997
Counseling

Haney, Ann L. 1966-2003
Behavioral Sciences

Hankin, J. Frank 1973-1994
E.O.P. & S.

Hankins, Clarice J. 1971-1990
Health Services

Hanlen, Charles J. 1969-1999
Economics, History, and Political Science

Harlow, James M. 1973-1997
English as a Second Language

Haugen, Nan E. 1974-2004
Physical Education

Hawkes, A. Dana 1973-2000
Communications

Hawley, Warren S. 1968-1992
Political Science

Hegland, Sheridan N. 1964-1970
Political Science

Heltzel, Eleanor J. 1968-1982
Child Development

Heyden, Victor 1957-1984
Speech

Heyne, Adolph 1946-1969
Foreign Languages

Hinthorne, Stephen G. 1968-1985
Mathematics

Hubbard, Donald J. 1971-1987
Physical Education/Athletics

Hudgens, Aileen 1962-1990
Mathematics

Hulbert, James C. 1964-1980
Art

Humphrey, Thomas R. 1966-2000
Business Education/Computer Science & Information Systems

Hydock, Joseph H. 1960-1988
Earth Sciences

I

Iserman, Carl L. 1971-1986
Welding

J

Jackson, Russell F. 1974-1990
Communications

Jeffery, Viola 1966-1982
Physical Education

Jessop, Raymond E. 1960-1993
Physics/Engineering/Chemistry

John, George E. 1980-1995
R.O.P.

Johnson, Jay 1961-1998
Foreign Languages

Jones, Francis S. 1972-1998
Art

K

Keesee, James H. 1960-1976
Electronics

Kilman, Dr. Theodore 1962-1993
Journalism, Vice President

Kirby, Stephen D. 1975-2003
Trade and Industry

Kline, Nellie I. 1962-1987
Business

Kooyman, Melba M. 1985-1998
Nursing Education

Kratt, John M. 1976-1993
Criminal Justice

Kremer, Palmer N. 1961-1980
History

L

Landmesser, Jean F. 1972-2002
Dental Assisting

Larson, Robert W. 1965-1998
Counselor/Director, Transfer Center

Latulippe, Jerome A. 1971-2000
Trades and Industry

Law, Dr. Patricia B. 1979-1995
Consumer Sciences

Leahy, John S. 1975-2004
Business Education

Lehr, Martha J. 1968-1985
Counseling

Lusky, Robert F. 1974-1997
Physical Education/Athletics

Lynds, Arthur L. "Tony" 1964-1997
Physical Education/Athletics

M

Mahan, Dr. Harry C. 1957-1984
Psychology

Mahoney, Joan M. 1970-1990
Nursing Education

Marrin, Dockin A. 1967-1990
Physical Education/Athletics

Martinek, Dennis A. 1979-2003
Business Education/Cooperative Education

Martinie, Francis R. 1966-1999
Economics, History, and Political Science

McCormick, Benedict J. 1969-1990
English

McGilvray, Duncan D. 1970-1996
Economics, History, and Political Science

McGuerty, Frank J. 1980-2000
Cooperative Education

Mendez, Mario J. 1976-2003
Physical Education

Michaelson, Brian N. 1969-2003
Computer Science and Information Systems

Minnick, William H. 1971-1990
Trades and Industry

Monk, Berrill G. 1958-1970
Music

Montiel, Dr. Brenda F. 1974-1998
Performing Arts

Mortimer, Godfrey G. 1948-1961
Physics/Mathematics

Muchow, Richard G. 1977-2000
Business Education

Murphy, Ruth G. 1970-1990
Nursing Education

Myers, Ward G. "Rusty" 1953-1973
Physical Education

N

Nation, Richard D. 1982-2002
Mathematics

Newbrough, Michael G. 1975-2004
Economics, History, and Political Science

Noble, Richard S. 1966-1981
Earth Sciences

Norlin, Dr. Richard F. 1959-1993
English

Nydegger, Mildred F. 1971-1981
Music

O

P

Pagakis, Chris N. 1961-1982
Physical Education

Peacock, Richard B. 1966-1997
Communications

Pesacreta, George D. 1974-2003
Foreign Languages

Petz, Dr. Irene A. 1953-1980
Chemistry

Phelps, Roland 1954-1968
Journalism

Pine, Kathy F. 1974-2003
Physical Education

Poole, Cynthia J. 1967-2003
Counseling

Pratola, Dr. Daniel J. 1959-1983
Foreign Languages

Q

Quintero, Jack C. 1965-2003
English

R

Reiser, Donna M. 1955-1975
Physical Education

Robertson, Everett T. 1956-1980
Engineering

Rogers, Ronna C. 1972-1997
Child Development Center

S

Sager, Gene C. 1971-2003
Behavioral Sciences

Salomone, William B. 1971-2002
English

Sanders, Val G. 1968-1998
Art

Saw, James T. 1973-2002
Art

Schettler, Dr. John D. 1956-1983
Philosophy, Vice-President

Schmidt, Dr. Patricia F. 1973-2003
Nursing Education

Schnelker, Barbara W. 1974-2001
Behavioral Sciences

Senge, Carl H. 1961-1982
Business

Shallcross, Marcia K. 1969-1994
Business Education

Shiwanov, Ernest 1966-1994
Chemistry

Soucek, Marilyn M. 1971-2003
Behavioral Sciences

Stanford, Joe R. 1966-2003
Performing Arts

Stevens, Eugene H. 1948-1977
Life Sciences

T

Tanner, John D. 1969-2004
Economics, History, and Political Science

Tatman, Sylvia C. 1977-1998
Nursing Education

Toll, Dr. George B. 1947-1970
Business

Tornillo, Louis M. 1977-1997
Trade and Industry

Toth, Dr. Beverly A. 1974-1998
Dental Assisting

Tucker, Carl K. 1981-2000
Trades and Industry

U

Ulman, Timothy W. 1969-2002
Foreign Languages

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W

Webb, Betty Jean 1969-1990
English

Weld, James H. 1965-1990
Music

White, Dr. Rita A. 1965-1990
Art

Wiebe, Mack C. 1965-1993
Cooperative Education

Wiestling, Ronald M. 1969-1990
Mathematics

Wildenberg, Joseph W. 1974-1995
Wastewater Technology

Wilhelm, Frederick L. 1968-1988
Communications

Williams, Barbara F. 1978-2003
Behavioral Sciences

Williams, Larry J. 1974-1998
Business Education

Willis, Joseph P. 1962-1990
Earth Sciences

Wood, Carolyn C. 1966-1997
Library/Media Center

Wood, James M. II 1969-1999
Physics & Engineering

Woodward, Dr. Robert M. 1959-1984
Business and Dean

Worret, Patricia A. 1980-2003
Nursing Education

Wunderley, Lois J. 1980-2000
Behavioral Sciences

X

Y

Young, J. Thomas 1972-2002
Communications

Z

Zarakov, Dr. Selma D. 1975-1995
Gerontology/Counseling

GLOSSARY AND INDEX



9



Glossary of Terms

Academic Renewal: A policy which allows a student to petition to exclude prior substandard course work from their transcript which is not reflective of their current demonstrated ability. Obtain petition from the Counseling Center.

Academic Review Committee: A process by which students can petition to deviate from the college's policies and procedures. Obtain petition from the Counseling Center.

Articulation Agreements: A list of courses offered at Palomar College which are acceptable at transfer universities as equivalent in content (or as acceptable substitutes) to those courses offered by the universities. These lists are available in the Counseling Center or the Transfer Center.

Associate in Arts (AA) Degree: Awarded upon completion of course work totaling not fewer than 60 degree applicable units in areas of: a) General Education, b) Major, c) Electives. Must apply by appropriate deadlines.

Auditing: To take a course without being graded or receiving credit, available to students by petition only.

California Articulation Number (CAN): Courses or course sequences which will be accepted in lieu of designated CAN courses or sequences at participating campuses in California.

Catalog: A book published once a year that governs students' progress toward degrees and certificates and contains course descriptions, programs, requirements, policies and procedures.

Certificate of Achievement (CA): Awarded upon completion of specified course work in a vocational/occupational program.

Certificate of Proficiency (CP): Designed to certify basic workplace competencies and job readiness. Awarded upon completion of specified course work.

Class Schedule: A booklet of class offerings, times, and locations published each term. The class schedule also contains information on how to properly register.

College-Prep Classes (non-degree appropriate): These courses, principally in the basic skills areas, prepare students to perform satisfactorily in associate and baccalaureate appropriate classes. Students can take no more than 30 units of these courses; they do not apply to the degree.

Continuing Student: One who has attended classes during the previous regular term.

Continuous Enrollment: Attendance at Palomar College for more than 30% (about 4 weeks) of each regular term. For graduation purposes, it is defined as attendance in one semester or two quarters (excluding Summer Session) within a calendar year in either the CSU or California CC system.

Directed Study: Individual study for advanced students which may include class work, research, or projects that do not fit into the context of regularly scheduled classes. Department chairperson approval required for enrollment.

Educational Plan: A document generated by a student and a Palomar College Counselor that allows the student and institution together to identify the student's educational objectives, and to formulate a method for reaching them.

Full-Time: A study load of 12 or more units per semester. The normal full-time load in Summer is 6 units. Nursing students are considered full-time with 9 units in nursing courses.

GATE (Guaranteed Admission for Transfer Entry): Palomar participates in the GATE program to UCSC. Consult a counselor to learn how to participate.

General Education (GE) Requirements: General Education requirements, also known as breadth requirements, are patterns of courses designed to expose students to broad areas

of knowledge in communication, sciences, arts and humanities, and social sciences.

Grade Point Average (GPA): Determined by dividing total grade points earned by total academic (A-FW) units attempted.

Grade Points: Points given for academic (evaluative) grades.

A = 4 points	D = 1 point
B = 3 points	F = 0 points
C = 2 points	FW = 0 points per unit of credit

Half-Time: A study load of 6 – 8½ units per semester.

IGETC (Intersegmental General Education Transfer Curriculum): A general education program that California community college transfer students can use to fulfill all lower-division G.E. requirements at most CSU or UC campuses (see a counselor for exceptions).

Lower Division/Upper Division: In colleges and universities, lower division means freshman and sophomore years and upper division means junior and senior years. Community colleges provide lower division course work for transfer to four-year colleges and universities.

Major: A major is a group of courses related to a defined area of study. All colleges and universities require students to declare and pursue a major.

Non Credit Courses: A variety of courses offered with no unit credit. The courses are taught by credentialed instructors and provide remedial, developmental, occupational, and other general educational opportunities to citizens of the community.

Probation: A warning status that scholastic standards are not being met.

Semester: A 17-week period of class work.

TAA (Transfer Admission Agreement): The TAA program guarantees qualified Palomar College students admission to UCD and UCSB. Consult a counselor to learn how to participate.

TAG (Transfer Admission Guarantee): The TAG programs guarantee qualified Palomar College students admission to UCSD and UCR. Consult a counselor to learn how to participate.

Tech Prep: A program in which high school students can earn college credit for certain occupational courses completed at their respective high schools.

Three-Quarter Time: A study load of 9 – 11½ units per semester.

Transcript (of Record): An official copy of the record of classes attempted and/or completed by a student. The transcript is maintained by the Palomar College Records Office and is considered confidential. It may be viewed or released only with permission of the student.

Tuition (Enrollment Fees): A charge for instruction.

Tutor: A person, recommended by faculty as knowledgeable in specified subjects, who is available through Tutoring Services free of charge to work with an enrolled individual in need of special assistance with course work.

Unit of Credit: A credit or semester unit represents one hour of class work per week for one semester. It is expected that most students will spend two hours outside class in preparation for each hour of lecture. Slightly less outside preparation time is expected in laboratory. Three hours of laboratory per week are approximately the equivalent of one unit.

Units Attempted: Credit units in which the student was enrolled beyond the 30% point of any course whether or not a passing grade was earned or the student withdrew from the course before its completion.

Work Experience: A program that combines classroom studies with on-the-job experiences.

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