PALOMAR COLLEGE
Learning for Success

2020-2021 CATALOG

PALOMARPOWERED Possibilities

PALOMAR COLLEGE®
Learning for Success

2020 - 2021 CATALOG
Vol. LXIX

Palomar Community College District
1140 West Mission Road
San Marcos, California 92069-1487
760-744-1150
http://www.palomar.edu

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. Academic programs with external accreditation include Dental Assisting, accredited by the Commission on Dental Accreditation of the American Dental Association and by the Dental Board of California; Nursing Education, accredited by the Board of Registered Nursing and the Accreditation Commission for Education in Nursing; Paramedic Program, accredited by the Committee on Accreditation of Educational Programs for Emergency Medical Services Professionals; and the Basic Police Academy, accredited by the California Commission on Peace Officer Standards and Training.

Palomar College holds membership in the Community College League of California (CCLC), the American Association of Community Colleges (AACC) and the Hispanic Association of Colleges and Universities (HACU). 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 2020 semester.

Welcome to Palomar College!

Your educational success is our top priority! At Palomar, we empower you to achieve your goals by providing the wide variety of degrees, certificates and transfer options and the most valuable career education programs of any higher education institution in our region.

In this catalog you will find programs and courses designed with you in mind, opportunities to expand your horizons, meet the requirements of your chosen field, and prepare you for the demands of the workforce. Whether your goal is earning an associate degree, transferring to a four-year university, being trained for a specific career, or gaining valuable skills to elevate your position in the job market, Palomar makes it possible!

Besides the tens of thousands of students we are proud to serve, Palomar is home to an exceptional team of faculty, staff and administrators who are dedicated to your success. Many of our student clubs and organizations are among the finest of any community college and will continue to meet remotely to offer you a great opportunity to engage with your peers. While you are here, you will be able to take advantage of the many valuable online student support services and programs, including counseling, health, financial aid, veteran services, tutoring and career guidance.

The information in this catalog will help you achieve your educational goals by explaining our academic policies, course offerings and support services. You will also learn what is expected of you as a Palomar student. We encourage you to familiarize yourself with this publication and reference it during the year.

At Palomar College, we care about your goal, get you there within your budget, and on your schedule!

¡Bienvenido a Palomar College!

¡Tu éxito académico es nuestra primera prioridad! En Palomar, te damos las herramientas para que logres tus objetivos, poniendo a tu disposición la oferta más amplia de títulos, certificados y opciones de transferencia académica, así como los más valiosos programas de educación profesional de cualquier institución de educación superior de la región.

En el catálogo encontrarás clases diseñadas para ti, clases que amplían tus horizontes, que cumplen con los requisitos del campo de estudios de tu elección y que te preparan para las exigencias profesionales. Independientemente de si tu objetivo es obtener un diploma de carrera corta, prepararte para una carrera específica, transferirte a un programa de licenciatura o adquirir aptitudes valiosas para mejorar tus oportunidades profesionales, ¡Palomar lo hace posible!

En Palomar, nos enorgullecemos de servir a decenas de miles de estudiantes, así como de contar con un equipo excepcional de profesores, personal y administradores, dedicados a ayudarte a alcanzar el éxito. Muchos de nuestros clubes y organizaciones estudiantiles se hallan entre los mejores de cualquier colegio comunitario y continuarán reuniéndose a distancia para ofrecerte una gran oportunidad de interactuar con tus compañeros. Como estudiante de Palomar, podrás aprovechar los valiosos servicios y programas de apoyo en línea, incluyendo asesoría, atención médica, ayuda financiera, servicios para veteranos, tutoría académica y orientación profesional.

La información en este catálogo te ayudará a alcanzar tus metas académicas. En el encontrarás nuestras políticas académicas, los cursos que se ofrecen y los servicios de apoyo disponibles. También aprenderás sobre lo que se espera de un estudiante Palomar. Te invitamos a familiarizarte con esta publicación y continuar consultándola a lo largo del año.

En Palomar College, nos importa tu objetivo, así como ayudarte a alcanzarlo a tu ritmo y dentro de tu presupuesto.

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GENERAL INFORMATION I

Section 1
General Information

Palomar College
Education Center Locations

Committed to serving the entire district, the college literally takes learning to its communities via the Education Centers located within the local communities of Escondido, Fallbrook, and Rancho Bernardo and three strategically located sites. At the Centers, and many of the sites, students may take credit 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 vocational programs, noncredit courses or seminars to upgrade career skills or to continue their lifelong journey of learning.

Escondido Education Center
760-744-1150, ext. 8134
1951 East Valley Parkway
Escondido, CA 92027
www.palomar.edu/escondido

Palomar College Escondido Education Center Admissions Office is open Monday through Thursday, 7:30 a.m. to 6:00 p.m., and Friday, 7:30 a.m. to 2:00 p.m. Parking permits are required at the Escondido Education Center.

Course Offerings: General education classes required for an associate degree and/or transfer, and noncredit classes. Vocational programs include Emergency Medical Education, Fire Technology, and ACR Technology. ESL credit and non-credit classes are offered.

Support Services: Admission and enrollment services, financial aid, cashier services, counseling, health services, food services, campus police, disability services, bookstore, and library with internet access. The Center also offers tutoring in the Teaching and Learning Center.

Fallbrook Education Center
760-744-1150, ext. 8464
35090 Horse Ranch Creek Road
Fallbrook, CA 92028
www.palomar.edu/fallbrook

Palomar College Fallbrook Education Center Admissions Office is open Monday through Thursday, 7:00 a.m. to 6:00 p.m., and Friday, 7:30 a.m. to 2:00 p.m. Parking permits are required at the Fallbrook Education Center.

Course Offerings: General education classes required for an associate degree and/or transfer. Academic programs include: Associate Degrees for Transfer in Business Administration and Sociology; core preparation in biology and nursing; and coursework in Emergency Medical Education; and Kinesiology.

Support Services: Admissions and enrollment services, financial aid, counseling, disability services, cashier services, Student Life & Leadership, food & nutrition center, bookstore delivery, Palomar College Police, library, computer lab, and tutoring services in the Teaching & Learning Center.

Rancho Bernardo Education Center
760-744-1150, ext. 8664
11111 Rancho Bernardo Road
San Diego, CA 92127
www.palomar.edu/ranchobernardo

Palomar College Rancho Bernardo Education Center Admissions Office is open Monday through Thursday, 7:30 a.m. to 6:00 p.m., and Friday, 7:30 a.m. to 2:00 p.m. Parking permits are required at the Rancho Bernardo Education Center.

Course Offerings: General education classes required for an associate degree and/or transfer. Academic programs include: Associate Degrees for Transfer in Mathematics and Communications Studies.

Support Services: Admissions and enrollment services, financial aid, counseling, cashier services, Student Life & Leadership, health services, disability services, food services, bookstore, Palomar College Police, and a library with internet access. The Center also offers tutoring in the Teaching & Learning Center.

Palomar College Site Locations

Camp Pendleton
760-744-1150, ext. 7818
Location: Building 1331
Camp Pendleton, CA 92055
www.palomar/camppendleton

Palomar College at Camp Pendleton is open Monday through Thursday, 8:30 a.m. to 6:00 p.m. and Friday, 8:00 a.m. to 2:00 p.m. Classes are offered in various areas of the base. A base pass is required for non-military students. Please see website for additional information.

Course Offerings: General education classes required for an associate degree and/or transfer, and noncredit classes. Programs are available in Administration of Justice: Law Enforcement, Administration of Justice: Homeland Security, Business-General, General Studies, and EMT Basic.

Support Services: Admissions and Enrollment Services, Financial Aid, Veterans Services, Counseling, Math Tutoring, Library, Cashier Services, bookstore delivery, and a computer lab.

Pauma

760-744-1150, ext. 7811
1010 Pauma Reservation Road
Pauma Valley, CA 92061

Hours vary; call for specific information.

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, and an on-site library.

Palomar College at Ramona

760-787-3608
1010 Ramona Street
Ramona, CA 92065

Palomar College at Ramona Community Campus 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.

Support Services: Admission and enrollment services and bookstore.

PALOMAR COLLEGE®
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Palomar College Locations and District Map

To Riverside

I-15

Temecula

Warner Springs

Hwy-79

FALLBROOK EDUCATION CENTER

Hwy-76

CAMP PENDLETON

Pala

PAUMA VALLEY

Bonsall

I-15

Hwy-76   Hwy-79

S2

S22

Valley Center

S2   S3

Hwy-79   Hwy-78

Oceanside

Santa
Ysabel

Carlsbad

**ESCONDIDO
EDUCATION CENTER**

Julian

**PALOMAR
COLLEGE
SAN MARCOS
CAMPUS**

I-5

Hwy-79

Hwy-78   Hwy-78

S2

Encinitas

Hwy-67

**PALOMAR COLLEGE
AT RAMONA**

Rancho
Santa Fe

**RANCHO BERNARDO
EDUCATION CENTER**

Del Mar

Lakeside

I-8

La Jolla

Pacific Beach

I-5   I-15

El Cajon

I-163

N

San Diego

(Map not to scale)

College Calendar 2020-2021

Summer Session 2020
4 week (1) classes begin .... May 26
8 week (1) classes begin .... June 22
Residence determination date .... June 22
6 week session begin .... June 22
4 week (1) classes end .... June 19
4 week (2) classes begin .... June 22
Last day to apply for an Associate degree, Certificate of Achievement, or Certificate of Proficiency .... June 30
Independence Day .... July 4
8 week (1) classes end .... August 19
6 week session end .... July 31
4 week (2) classes end .... July 17
4 week (3) classes begin .... July 20
4 week (3) classes end ....August 14

Fall Semester 2020
First day applications accepted .... October 1
Registration begins .... June 4
Faculty Plenary .... August 20 - 21
Residence determination date .... August 24
Classes begin .... August 24
Last day to drop full semester-length classes with no grade placed on permanent record .... September 7
Labor Day .... September 7
Native American Day .... September 25
Last day to apply for an Associate degree, Certificate of Achievement, or Certificate of Proficiency .... September 30
Last day to drop full semester-length classes with 'W' .... October 17
Veterans' Day .... November 11
Non-instructional days .... November 23-25
Thanksgiving Holidays .... November 26-27
Non-instructional day .... November 28
Fall semester ends .... December 19
Semester break/Professional development .... December 22 - January 1

Winter Intersession 2021
Classes begin .... January 4
Classes end .... January 29

Spring Semester 2021
First day applications accepted .... September 8
Registration begins ....TBD
Martin Luther King, Jr. Day .... January 18
Residence determination date .... February 1
Classes begin .... February 1
Part-time Faculty Plenary .... January 28
Lincoln's Day .... February 12
Non-instructional Day .... February 13
Last day to drop full semester-length classes with no grade placed on permanent record .... February 15
Washington's Day .... February 15
Last day to apply for an Associate degree, Certificate of Achievement, or Certificate of Proficiency .... February 28
Last day to drop full semester-length classes with 'W' .... March 27
Spring recess .... March 29 - April 2
Memorial Day .... May 31
Evening commencement .... May 28
Spring semester ends ....May 29
Non-instructional Day .... April 3

College Organization

District Governing Board
Nina Deerfield

Mark R. Evilsizer

John J. Halcón, Ph.D.

Nancy Ann Hensch

Norma Miyamoto

Student Trustee

Superintendent/President
Jack S. Kahn, Ph.D....**Ext. 2521**

Acting Superintendent/President

Communications, Marketing and Public Affairs
Julie Lanthier Bandy, Director ....**Ext. 2365**

Foundation
Stacy Rungaitis, Executive Director ....**Ext. 2733**

Institutional Research and Planning
Michelle A. Barton, Senior Director ....**Ext. 2360**

Instructional Services
Shayla Sivert...**Ext. 2521**

Acting Assistant Superintendent/Vice President

Division of Arts, Media, and Business Administration
Justin Smiley, Dean ....**Ext. 2154**

Art Department ....Ext. 2302

Business Administration Department ....Ext. 2488

Graphic Communications Department ....Ext. 2452

Media Studies Department ....Ext. 2440

Performing Arts Department ....Ext. 2316

Division of Career, Technical, and Extended Education
Margie A. Fritch, Dean ....**Ext. 2276**

Cooperative Education Department ....Ext. 2354

Design and Manufacturing Technologies Department ....Ext. 2349

Emergency Medical Education ....Ext. 8150

Occupational and Noncredit Programs ....Ext. 3019

Public Safety Programs ....Ext. 1722

Trade and Industry Department ....Ext. 2545

Workforce Development and Extended Studies ....Ext. 2600

Division of Languages and Literature
Dr. Fabienne Chauderlot, Ph.D., Dean ....**Ext. 2251**

English Department ....Ext. 2392

English as a Second Language Department ....Ext. 2261

Reading Services ....Ext. 2251

Speech Communication/Forensics/ASL Department ....Ext. 2405

Tutoring Services Program ....Ext. 2448

World Languages Department ....Ext. 2390

Division of Mathematics, Sciences, and Engineering
Margie Fritch, Acting Dean ....**Ext. 2253**

Dental Assisting Program ....Ext. 2571

Nursing Education Department ....Ext. 2580

Nichol Roe, Acting Dean ....**Ext. 3964**

Biology Department ....Ext. 2275

Chemistry Department ....Ext. 2505

Computer Science and Information
   Technology Department Ext.2387

Earth, Space and Environmental Sciences Department ....Ext. 2512

Mathematics Department ....Ext. 2535

Physics and Engineering Department ....Ext. 2505

Division of Social and Behavioral Sciences
Pearl Ly, Ed.D., Dean ....**Ext. 2759**

American Indian Studies Department ....Ext. 2425

Behavioral Sciences Department ....Ext. 2329

Child Development Department ....Ext. 2206

Early Childhood Education Lab School ....Ext. 2575

Economics, History, and Political Science Department ....Ext. 2412

Health, Kinesiology and Recreation
   Management Department ....Ext. 2459

Library and Information Technology ....Ext. 2666

Library/Learning Resource Center.........................Ext. 2612

Multicultural Studies Department ....Ext. 2206

Palomar College Locations
Tom Medel, Director, Education Center ....**Ext. 8103**

Escondido Education Center ....Ext. 8134

Rancho Bernardo Education Center......................Ext. 8664

Ryan Williams, Director, Education Center ....**Ext. 7821**

Fallbrook Education Center .... Ext. 8464

Camp Pendleton Site ....Ext. 7818

Pauma Site 760-742-1121

Student Services
Vikash Lakani, Ed.D...Ext. 2158
Assistant Superintendent/Vice President

Athletics
Daniel Lynds, Director ....Ext. 2464

Campus Police
Christopher Moore, Chief of Police.........................Ext. 2289

Counseling Services
Olga Diaz, Interim Dean ....Ext. 3624
Articulation Services ....Ext. 2737
Assessment Center .... Ext. 2182
Career Center ....Ext. 2194
Counseling Center ....Ext. 2680
Disability Resource Center ....Ext. 2375
Extended Opportunity Programs and Services ....Ext. 2449
Grant Funded Programs ....Ext. 3680
Student Success and Support Program .... Ext. 2184
Transfer Center ....Ext. 2552

Enrollment Services
Kendyl L. Magnuson, Ed.D., Senior Director ....Ext. 2171
Admissions and Enrollment ....Ext. 2164
Admissions and Enrollment, Escondido ....Ext. 8134
Evaluations and Graduation ....Ext. 2165
Financial Aid and Scholarships ....Ext. 2367
International Education ....Ext. 2167
Student Records and Transcripts...Ext. 2169
Veterans' Resource Center ....Ext. 2173

Health Services
Patrick Savaiano, Psy.D., Assistant Director ....Ext. 2380

Student Life & Leadership
Sherry M. Titus, Director ....Ext. 2595

Finance and Administrative Services
Yulian Ligioso, Acting Assistant
Superintendent/Vice President ....Ext. 2109
Business and Contract Services ....Ext. 2122
Cashier Services ....Ext. 2114
Facilities ....Ext. 2629
Fiscal Services ....Ext. 2215
Information Services ....Ext. 2140
Payroll Services ....Ext. 2937

Human Resource Services
Linda Beam ....Ext. 2203
Acting Assistant Superintendent/Vice President
Human Resource Services ....Ext. 2609

History of the College

Palomar College has a history rich in tradition and educational achievements. 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. Under state law, the San Diego County Superintendent of Schools appointed five persons as members of the first Governing Board for the new college. The Governing Board hired the first college president in 1946, Dr. Daniel C. McNaughton, who was supported by a director, a dean of students, and nine faculty members. Located on the Vista High School campus, Palomar College opened its classroom doors on September 23, 1946, with exactly 100 students enrolled in classes in science, mathematics, music, art, social sciences, commerce, English, physical education, and foreign languages.

Today, Palomar College is a public, two-year comprehensive community college serving a large student body of diverse ages, ethnicities, and lifestyles. The District's 200-acre main campus is located at 1140 West Mission Road in San Marcos. The San Marcos campus, Education Centers in Escondido, Fallbrook, Rancho Bernardo and three additional sites serve a District covering 2,555-square-miles ranging from urban to agricultural areas of North San Diego County.

The three education sites are located in Camp Pendleton, Ramona, and Pauma Valley. The Escondido Education Center is located on eight acres owned by the District, and the Fallbrook Education Center is located on an 82-acre property in Fallbrook. The Rancho Bernardo Education Center includes a large building and associated parking structure.

Palomar College constitutes a single-college district, and it is the largest single community college district in San Diego County. Palomar College borders seven other community college districts: South Orange County, Mt. San Jacinto, Desert, Imperial Valley, Grossmont-Cuyamaca, San Diego, and MiraCosta.

Palomar College has five academic divisions: (1) Arts, Media, and Business Administration; (2) Career, Technical, and Extended Education; (3) Languages and Literature; (4) Mathematics, Sciences, and Engineering; and (5) Social and Behavioral Sciences. The College offers more than 200 credit degree and certificate programs within those five divisions and noncredit courses. At Palomar, students have the opportunity to participate in a vibrant college life that includes free art and cinema series, 34 academic and social campus organizations, and competitive intercollegiate sports teams for men and women, and dozens of music, theatre, and dance performances.

In the November 2006 General Election, voters approved an educational facilities improvement measure (Proposition M), which provides the majority of the funding for the College's $1 billion construction and remodel plan. The first major step in the implementation of this plan was realized with the completion of the Natural Sciences Building, which opened for the fall 2007 semester. This is an exciting time for students, faculty, staff, and administration at Palomar College. The vision in the Master Plan 2022 has moved to reality as the planning, design, and construction of several instructional and support facilities take shape. Master Plan 2022 is transitioning Palomar College into its next generation as an outstanding institution of higher education committed to the learning success of its students and responsive to the changing needs of its diverse community.

Vision
Learning for Success

Mission
Our mission is to provide an engaging teaching and learning environment for students of diverse origins, experiences, needs, abilities, and goals. As a comprehensive community college, we support and encourage students who are pursuing transfer-readiness, general education, basic skills, career and technical training, aesthetic and cultural enrichment, and lifelong education. We are committed to helping our students achieve the learning outcomes necessary to contribute as individuals and global citizens living responsibly, effectively, and creatively in an interdependent and ever-changing world.

Values
Palomar College is dedicated to empowering students to succeed and cultivating an appreciation of learning. Through ongoing planning and self-evaluation we strive for continual improvement in our endeavors. In creating the learning and cultural experiences that fulfill our mission and ensure the public's trust, we are guided by our core values of
- Excellence in teaching, learning, and service
- Integrity as the foundation for all we do
- Access to our programs and services
- Equity and the fair treatment of all in our policies and procedures
- Diversity in learning environments, philosophies, cultures, beliefs, and people
- Inclusiveness of individual and collective viewpoints in collegial decision-making processes
- Mutual respect and trust through transparency, civility, and open communications
- Creativity and innovation in engaging students, faculty, staff, and administrators
- Physical presence and participation in the community

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 and responsible examination of the question of personal rights can the rights of an individual in a democratic society be fully understood.

The fundamental assumption of the democratic way of life is the intrinsic worth of the individual. This assumption, therefore, becomes the fundamental principle of public education in a democratic community.

In order to become an effective member of a democratic society, an individual must take part in a free exchange of ideas. Only within a free society is the individual assured this free exchange of ideas and the maximum freedom of choice and opportunity for self-realization consistent with the freedoms and opportunities of others. Only within a free society can the human personality attain its greatest stature.

The community college, by providing equal opportunities for individuals to develop their differing abilities and interests, enables students to realize more fully their potentials. Thus, their talents become more readily available to the community, and their participation in society becomes more effective.

In keeping with this educational philosophy, Palomar Community College District declares itself a safe haven for learning and reaffirms its unequivocal support of all students regardless of race, religion, national origin, immigration status, sexual orientation, family structure, or gender identity.

Academic Freedom

The District encourages freedom of expression and the free flow and exchange of information and ideas. The District seeks to protect academic freedom and supports free and unfettered scholarly inquiry for all constituencies.

The instructional program at Palomar College shall be conducted in accordance with principles of academic freedom of expression and inquiry within the framework of rights and responsibilities

The District considers academic freedom, defined by its attendant rights and responsibilities, as a vital, primary force in the achievement of the aims and objectives of the institution. Academic freedom inherently involves the following rights and responsibilities:

- To research to the limit of competence and training, the assigned teaching area and its references
- To question and challenge, without fear of censorship or discipline, those actions originating from within the institution which seriously affect the total academic environment
- To introduce, within the assigned teaching area, controversial concepts, issues, and systems, subjecting these ideas to the test of reasoned inquiry
- To create free and clear intellectual atmosphere democratically maintained, encouraged, and supported by students, staff, administration, and members of the Governing Board

- To associate with those individuals or groups of one's choice without fear of censorship or discipline, unless such association is forbidden by law
- To speak or write publicly, free of prior censorship or subsequent discipline by the college or District, as a citizen on matters of public concern
- To make reasonable efforts to be accurate in public statements about college and District matters, and to indicate that they write or speak as public citizens and not as spokespersons of the institution

At no time will the inherent right of faculty members to use any of the normal channels of campus communication be abridged, nor will individual faculty members be singled out for prior censorship of their use of such channels of communication. It is understood that faculty members exercising this right will accept responsibility for both the substance and the manner of their messages. In compliance with these principles, the District encourages faculty, staff, and student involvement with others in support of candidates for offices or in the furtherance of other political activities, as long as no District resources are used for these purposes. This policy will be published in the District catalog annually and disseminated to the employees of the District no less than annually and whenever it is amended.

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 5:00 p.m. on the second Tuesday of the month. Meetings are open to the public.

Palomar College Foundation

The Palomar College Foundation continues its half-century legacy of creating a path to success for Palomar College students. Since its inception, the Foundation has raised much-needed support for crucial programs and services not covered by the state budgeting process. It is the Foundation's financial help that allows many Palomar students to achieve their academic dreams.

The Foundation inspires philanthropic support from individuals, corporations, and foundations. That support helps remove financial barriers and assure equal access to educational opportunity for students throughout North County. The Foundation provides direct student support through a variety of programs, including its Textbook Assistance Program, assistance to military veterans, scholarships, and other forms of financial aid. The Foundation also provides financial support for college and faculty initiatives that improve the student educational experience.

Working together with individuals, corporations and foundations, we are making a real difference in our region.

We are proud of our role in helping thousands of students achieve success in their lives and we are proud of our role in establishing a solid tradition of philanthropic support in the communities we serve.

For more information about the Foundation, please contact us at 760-744-1150, ext. 3103.

Commitment to Diversity

The District is committed to employing qualified administrators, faculty, and staff who are dedicated to student success. The Governing Board recognizes that diversity in the academic environment fosters cultural awareness, promotes mutual understanding and respect, and provides suitable role models for all students. The Governing Board is committed to hiring and staff development processes that support the goals of equal opportunity and diversity and provide equal consideration for all qualified candidates. (B.P. 7100)

Designation of Responsible Employee as Title IX Coordinator

The Assistant Superintendent/Vice President, Human Resource Services is designated as the District's Title IX Coordinator, and can be reached at 760-744-1150, ext. 2531 or in room A-1 of the Administrative Services building.

ADMISSIONS & REGISTRATION <u>2</u>

Section 2
Admission and Registration

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).

Nondiscrimination Policy

As stated in BP 3410, the Palomar Community College District is committed to equal opportunity in educational programs, employment, and all access to institutional programs and activities. In addition, all students have the right to participate fully in the educational process, free from discrimination and harassment.

The District and each individual who represents the District shall provide equal access to its services, classes, and programs without regard to national origin, religion, age, sex, gender, gender identity, gender expression, race, color, medical condition, ancestry, sexual orientation, marital status, physical or mental disability, or because he/she is perceived to have one or more of the foregoing characteristics, or based on association with a person or group with one or more of these actual or perceived characteristics.

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 complete Board Policy may be found at http://www.palomar.edu/gb/ under Governing Board, Policies and Procedures.

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, Nursing Program, Fire Academy, and Police Academy is by special application. For information about their application process, contact the individual program.

Special Admission for Accelerated Students

To be considered for admission, minors must have completed the ninth grade or reached the age of 16, and have permission of the local school district. Home-schooled minors may enroll with permission of the local school district. Minors, under 16 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. 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. Minor children enrolled in classes and programs must adhere to the Student Code of Conduct.

Minor Children

It is the expectation of Palomar College that minor children of currently enrolled students will be under the constant supervision of parents or guardians (not with-standing 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 may be directed to remove the minor children from District facilities (classrooms, libraries, food services, operations, athletic events, public areas, etc.) should violations occur.

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," for tuition purposes, 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" shows 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 a state agency 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.

Right to Appeal

Students who have been classified as nonresidents have the right to a review of their classification (T5, 54010). Any student, following a final decision of residence classification by the Enrollment Services Office, may make written appeal to the Enrollment Services Office within 30 calendar days of notification of the final decision by the District regarding classification.

The appeal must be submitted to the Enrollment Services Office. Copies of the original application for admission, the residency questionnaire, and evidence or documentation provided by the student, with a cover statement indicating upon what basis the residence decision was made, must be forwarded with the appeal.

The Enrollment Services Office shall review all the records and have the right to request additional information from either the student or the Admissions Office. The Enrollment Services Office will render a final decision.

Within 30 calendar days of receipt, the Enrollment Services Office shall send a written determination to the student. The determination shall state specific facts on which the appeal decision was made.

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 photo attached
- Palomar College Application for Admission
- Confidential financial statement certified by bank official
- Test of English As a Foreign Language (TOEFL) score of 470 (PBT) or 47 (IBT) or IELTS score of 5.0
- Proof of high school graduation
- Official transcripts of high school and all schools after high school
- Official transcript of any intensive English schools in the United States
- Copy of valid passport
- Affidavit of financial support

Application Deadlines:

FALL

May 1	Overseas applicants (to qualify for priority registration)
May 15	Transfer applicants (to qualify for priority registration)
June 30	Late transfer applicants (depending on availability of courses)

SPRING

Nov 1	Complete application packets submitted by October 15th qualify for priority registration (overseas and transfer students)
Nov 15	Transfer students who did not meet the priority registration deadline.
NOTE:	Applications submitted by students who are already in the U.S. with the F-1 (student) visa after the application deadline may be accepted on a case by case basis (depending on the availability of courses).

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

Palomar College
Office of International Education
1140 West Mission Road
San Marcos, CA. 92069-1487 USA
(760) 744-1150 Ext. 2167
(760) 761-3592 Fax
www.palomar.edu/internationalstudents
intladm@palomar.edu

Student Success and Support Program

(formerly the College Matriculation Program)

Palomar College agrees to:
- 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
- Work with us to develop an educational plan
- 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 orientation session at the Assessment Center, SU-1, or at the Escondido Education Center on-line or in person.

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 noncredit 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.

The goals of the Student Success and Support Program (SSSP) are to ensure that all students complete their college courses, persist to the next academic term, and achieve their educational objectives through admissions, orientation, assessment, educational planning with a counselor, and student follow-up.

Placement, Orientation and Educational Planning

The English, Reading and Math Placement results are based on the information students provide while completing the online application for admission.

Results can be viewed on the e-services student portal, at the bottom right corner of the Student Center page in the Assessment/ Placement Eligibility box.

In addition to answering the Multiple Measures questions on the application, the following options are also available to students:
- 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.
- Students may submit CSU EAP scores to receive Palomar placement if they placed into college-level English and/or math.
- Non-native English speakers may participate in a specialized placement process. Contact the ESL Department.
- Special testing conditions are offered for disabled students through the Disability Resource Center (DRC).
- Students may place themselves in entry-level classes and progress through the curriculum

Student challenges to placement will be reviewed on an individual basis. Please contact the Assessment Office located in SU-1.

Orientation?
New students may complete an on-line orientation.

To access the orientation content, login to the MyPalomar Student Portal and look for your to-do list items. You may also request an in person orientation session by visiting https://www2.palomar.edu/pages/orientation.

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 any matriculation procedure is being applied in a discriminatory manner, you may file a complaint with the Dean of Counseling Services, ext. 3624.

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 successfully ('C' or better) 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 Colleges 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 administratively 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 pass (D, F, FW, NP/NC, Inc, or W) the course, you will be administratively 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:
- A prerequisite or corequisite has not been made reasonably available.
- A prerequisite or corequisite has not been established in accordance with the District's process for establishing prerequisites and corequisites.

- You can provide evidence of having the knowledge or ability needed to succeed in the course despite not meeting the prerequisite or corequisite.
- You may challenge other limitations on enrollment.
- You may challenge a prerequisite or corequisite established to protect the health and safety of himself, herself, and/or others.
- A prerequisite, corequisite, or limitation on enrollment is discriminatory or applied in a discriminatory manner.
- 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

Although not required for admission, it is highly recommended that students provide the college with official transcripts from all other colleges attended upon enrollment.

Official transcripts are required for:
- Transfer credit course work to be applied to current Palomar educational goals
- Transfer credit course work to be applied to pre- and co-requisite requirements
- Associate degree evaluation
- Certification of lower-division course work for CSU or UC transfer
- Veterans educational benefits certification
- Nursing program admission

Financial Aid students should refer to the Satisfactory Academic Progress (SAP) policy on the Financial Aid website, www2.palomar.edu/pages/fa/, for information on financial aid transfer credit requirements.

Transcripts received become the property of Palomar College and cannot be returned to the student or forwarded to other schools. If a student has submitted transcripts from another institution, and has not attended within two years or has not applied for graduation, transcripts may be purged from the student's records and must be re-submitted by the student.

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 Associate degree.

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

Financial Aid Applications and Enrollment Fees

Students are encouraged to apply for financial aid online as early as possible. Though applications are accepted throughout the academic year, students should apply before March 2nd to maximize their eligibility potential for both federal, state and institutional financial aid. Information and application links to the Free Application for Federal Student Aid (FAFSA) and California Dream Act Application (CADA) are available on the Palomar College financial aid webpage at https://www2.palomar.edu/pages/fa/ .

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

California residents and other eligible students not already awarded a California College Promise Grant (CCPG) through the FAFSA or CADA may apply online for the CCPG through their eServices link "Apply for a California College Promise Grant" located under the Financial Aid section of their Student Center page. Students must meet residency and academic eligibility requirements to access this link.

Enrollment Options

Community Education Classes
Noncredit courses which support life-long learning. May be either full term or short term.

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.

Palomar Promise Program
The Palomar Promise offers up to two years of free course enrollment and related registration fees, textbook assistance, and access to specialized academic and career planning with related support services to first-time college students who meet the eligibility requirements. Program benefits subject to available funding. For more information, visit: www.palomar.edu/palomarpromise

Full Term Classes
A regular semester course of 16 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 engaging learning experience in which students enroll in two or more linked courses. By studying with the same group of students across multiple courses, a Learning Community student connects more deeply to the course material, makes lasting friendships with other students, and receives increased academic support from instructors and tutors. Students must enroll in all courses in a particular Learning Community in order to participate and must remain enrolled in both throughout the semester. For more information, visit our website:
www.palomar.edu/learningcommunities.

Online Classes
Online 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 aid awards may be impacted in certain cases. Please check with the Financial Aid Office for more information. Online classes are academically equivalent to traditional face-to-face classes. For more information, visit our web site at https://www2.palomar.edu/pages/atrc/canvas/

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 16 weeks.

Summer Bridge
Summer Bridge is a non-credit program whose goal is to assist students in improving their skills in English, ESL and/or Math. ESL Summer Bridge offers 4 and/or 6 week sessions to help ESL students improve their academic English reading and writing skills. Bridge to College Math is a 3 week session designed to give students support by building their mathematical confidence and proficiency while improving their math placement. For information on ESL Summer Bridge, visit: www.palomar.edu/esl. For information on Bridge to College Math, visit: www.palomar.edu/math

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

Video Classes
A college credit course which uses cable television, streaming video, DVDs, and 5-7 campus meetings to deliver instruction. Video classes include video programs, textbooks, assignments, examinations, and class discussion. This type of class allows students to study and complete course work when and where it is convenient for them to do so. Student/Instructor interaction occurs online and at scheduled campus meetings. The course syllabus, other instructional materials, and the streaming video are accessed through the Blackboard online system. Video is also available on cable television and via DVD checkout at the Palomar College San Marcos campus library and some Palomar College sites. Video courses are academically equivalent to traditional campus courses, and satisfy pre-collegiate, elective, or general education requirements toward certificate or A.A. degree programs. For more information, visit www.palomar-tv.com.

Weekend College
Attend classes offered on Friday evening, Saturday and Sunday.

Workforce and Community Development Seminars
Not-for-credit workshops, classes, seminars, activities, and events to help you continue learning throughout your life. Usually taught as evening or weekend courses.

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 college calendar in the front pages of this catalog for the dates applications are accepted or check our web page at www.palomar.edu/admissions for the most current information.

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 MyPalomar to enroll. Continuing students have automatic eligibility to enroll. New students may apply online at www.palomar.edu or by submitting an Application for Admissions to the main campus or at a College Center. Returning students may enroll after updating their application data online through their eServices account. All students are issued a unique Palomar student ID number, which will be used for enrolling and all other transactions with Palomar. See the Class Schedule for more information.

Enrollment Appointments (Priority Registration)

Enrollment appointments are assigned times in which a student can first register for classes for an upcoming term. Palomar College's system for distributing enrollment appointments is published in the Class Schedule.

Our system is designed to:
- reflect our core mission of transfer, career technical education, and basic skills development;
- encourage students to identify their educational objective and follow a prescribed path most likely to lead to success;
- ensure access and the opportunity for success for new students; and
- incentivize students to make progress toward their educational goals.

Students are assigned to one of eight groups:

Group 1.
　Disability Resource Center (DRC), EOP&S, foster youth, CalWORKS, eligible veterans, and active duty military personnel

Group 2.
　Students in their last term of attendance prior to graduation or transfer.

Group 3.
　New, returning, transfer, and continuing students who complete orientation, assessment and development of an educational plan.

Group 4. (SSSP Category 3)
　Students participating in approved special programs.

Group 5. (SSSP Category 3)
　Continuing students

Group 6.
　New, returning, or transfer students who are not in Group 3.

Group 7.
　Returning or continuing students with 90 or more earned units of credit completed at Palomar College (as earned units are defined earlier in this Administrative Procedure) and/or students who have been on Academic or Progress Probation for two or more consecutive terms.

Group 8.
　Non-high school graduates age 16 to 18. Students less than 16 years of age require permission of the instructor to enroll in classes.

A student who has been on Academic or Progress probation for two consecutive terms and/or who has earned 90 or more degree-applicable earned units completed at Palomar College will be placed at the end of the priority registration cycle.

The units that are counted towards the 90 earned units limit are defined in Title 5, Section 55023, and include courses with grades of A, B, C, D, and P. Grades of W, I, F, FW, MW, and NP are excluded. Also excluded are Basic Skills and Non Credit ESL.

Palomar College may allow students who have demonstrated significant academic improvement to appeal the loss of priority enrollment status due to having been on Academic or Progress Probation for two or more consecutive terms. Significant academic improvement is defined as achieving no less than a 2.0 GPA and successful completion of more than 50% of course work for the term or terms. Students in "high unit" majors may petition for an exception to the limit of 90 earned units. High unit majors are defined as programs requiring more than 40 units. Petitions are submitted to the Admissions Office and will be reviewed by the Program Eligibility Appeals Committee.

Procedure for Adding and Dropping Classes

Adds and drops are processed online through MyPalomar 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 MyPalomar. 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 MyPalomar 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 two weeks of a full semester course, or first 20% of a short-term course, no grade will be assigned and no notation will appear on the student's permanent record.

Between the second week and the eighth week of a full semester course, or between 20% 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 "FW" grade, unless the student executes a drop within the time periods indicated above. Refer to the college calendar in the front pages of this catalog for specific dates or check our web page at www.palomar.edu/admissions for the most current information.

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 for paying all mandatory fees. All fees are due at registration. Students who do not pay for their classes may not be dropped, and will still owe enrollment fees. The college will waive or refund enrollment fees only when a drop is processed within the first two weeks of a class. Failure to make payments of any amounts owed to the College when they become due is considered sufficient cause to withhold future enrollment, grades, transcripts, diplomas, certificates, and/or degrees. Unpaid fees are subject to collection penalties.

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. Not considered for BOGW or Financial Aid eligibility.

Classroom Expenses

Students will incur a reasonable amount of general classroom expenses (for example: supplies, materials for homework projects, printing or copying costs). Some classes may require additional expenditures, such as for field trips, admission fees to public attractions or performances. When required, such expenses are generally noted with the respective class in the Class Schedule or class syllabi.

Enrollment Fee

$46 per unit - This mandatory fee is subject to change.

Health Fee

A health fee is charged to all students for operation of the Student Health Centers as authorized in Education Code Section 76355. Student Health Fee is $21 for Fall and Spring Semesters and $18 for Summer.

The following students are exempt by law:
· Students who are 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.

Other exempt students include:
· Students who are active duty military and taking classes exclusively at the Camp Pendleton Center or who are deployed overseas.
· Students who exclusively attend Not-for-Credit Instruction
· Students who are exclusively taking contract education classes.
· Students who are exclusively taking classes in the Instituto Nacional para la Educación de los Adultos (INEA) program.
· Students who are exclusively enrolled in non-credit classes at educational sites where Palomar College does not offer on-site Student Health Services.

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

Non-Resident Tuition- $290 per unit. Non-residents and international students must also pay all other applicable fees. Please refer to the current class schedule.

Nonsufficient Funds Fee

$20 for each check returned to the College.

Parking Fee

Parking Fee -$46 per semester and $26 for students receiving CCPG. Please refer to the current class schedule.

Student Activity Card

The Student Activity Card provides free and discounted benefits to currently enrolled students. The card is $15 each semester and students can purchase it online through their MyPalomar account or at the Cashier's office. Once paid, students will need to go to the Access & Engagement Center (SU-19) to have their picture taken and pick up their card.

Student Center Fee

The student center fee is $1 per unit and it is not to exceed $10 per academic year. Funds generated through this fee will be used to finance and support operating costs and renovations to the Student Union. The fee is non-refundable and students who receive benefits through CalWORKS (known as TANF), SSI, SSP and the General Assistance Program are exempt from this fee.

Student Representation Fee

Per Assembly Bill No. 150 4, a $2 fee per semester is collected to provide funds to support governmental affairs representatives of local or statewide student body organizations who may be stating their positions and viewpoints before city, county, and district governments and before offices and agencies of state government.

Transcript Fees

First 2 requests ever: Free
3rd request and up: $5.00 each
Rush service: Additional $5.00 each
Online request: $13.00 each

Verification Fees

Fee requests include verification of semester units, overall units, and military dependent ID requests
All requests: $5.00 each
Rush service: Additional $5.00 each

Non-fee requests include federal loan deferments and non-enrollment.

Refer to Section 5, Official Transcript and Verification of Enrollment, for specific information on requesting transcripts and verifications.

Refunds

Refund Policy for Student Fees

Students must drop or withdraw by the published refund deadline in order to receive a refund of fees. The following fees are subject to refund: enrollment, health, and non-resident tuition. Material fees will be refunded as long as the student has not used any of the class materials. Please see the current class schedule for the appropriate deadline date.
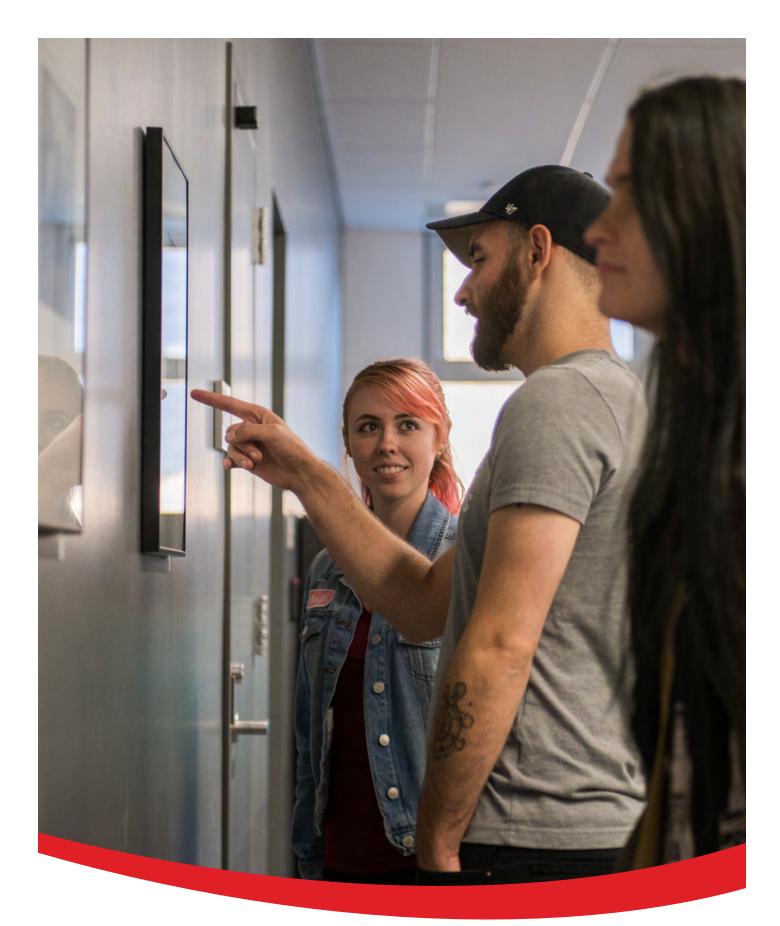
Parking Refunds

Parking permit refunds can be requested by calling Credentials' Solutions at 847-716-3005. Parking permit refund requests are honored within the Add/Drop period only.

Appeal Procedure

An appeal of the rules pertaining to a refund of fees must be made in writing using the Petition for Refund form and submitted to the Senior Director of Enrollment Services. The appeal must include the reason, and any available backup documentation, for requesting the exception.

Student Representation Fee Waiver

A student may opt out to the pay the $2 Student Representation fee at the time of completing their registration. Students who wish to opt out will need to decline the fee request through their MyPalomar account.

STUDENT SERVICES <u>3</u>

Section 3
Student Services

Admissions and Records
Admissions & Enrollment, SSC-49, Ext. 2164
Evaluations & Graduation, SSC-40, Ext. 2165
Student Records & Transcripts, SSC-55, Ext. 2169
All students must submit an application for admission in order to attend Palomar College. The admissions application permits a student to enroll, and establishes a history for each student. The Admissions Office processes adds, drops, reinstatements, refund petitions, and applications for audit and Pass/No Pass (Credit/No Credit).

The Records and Evaluations Office are responsible for maintaining academic records, enforcing academic regulations, and awarding degrees and certificates. The Records Office processes grades; maintains student academic history; processes requests for transcript and verifications of enrollment; receives transcripts, test results, etc. from other institutions; and processes Petitions for Academic Renewal and Credit by Examination. The Evaluations Office processes petitions for graduation and transfer; evaluates transcripts and records; posts degrees, certificates, and transfer certifications; processes Academic Standing, including Dean's List and Probation/Dismissal; and processes Petitions for Course Repetition.

Articulation Services
AA-114, Ext. 2737
The Palomar College 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, online at http://www.assist. org , and on the Articulation website at http://www.palomar.edu/articulation/.

Athletics
O-10, Ext. 2460
The intercollegiate athletics program at Palomar College is one of the most comprehensive and diverse among the California Community Colleges, featuring 22 varsity sport programs and over 450 student participants annually. Palomar fields intercollegiate teams in the following men's sports: baseball, basketball, cross country, football, golf, soccer, swimming and diving, tennis, volleyball, water polo, and wrestling. The list of women's sports includes: basketball, beach volleyball, cross country, golf, soccer, softball, swimming and diving, tennis, track and field, volleyball, and water polo. Additionally, the Athletic Department oversees a co-educational cheerleading program. Students must meet the eligibility standards of the California Community College Athletic Association in order to represent the institution athletically. Please contact the Athletics Department for more information.

Bookstore Services
SU Bldg., Ext. 2220
The Palomar College Bookstore provides print and digital textbooks for sale and/or rent. The Bookstore also provides supplemental reading materials, supplies, Palomar-imprinted merchandise, as well as computer products including laptops, tablets, and educationally discounted software to students, staff, and faculty.

Textbook services are provided by the bookstore at most Educational Center locations. Please check the Class Schedule for exact times and locations. The Bookstore is a lease operation run by Follett Higher Education Group and is responsible for its own income and expenses. Hours of operation for the San Marcos campus vary throughout the year. Please visit www.palomarstore.com for the most current information on the Palomar College Bookstore.

Campus Tours
Ext. 3756
Palomar College offers campus tours to prospective students at any stage in their educational journey. Join us for a walking campus tour and learn about our degree offerings and student support services, while we connect you to the resources that will launch your academic success. Individual, group, veteran/military and academic specialized tours are available. Please request group tours at least one month in advance to provide us with efficient time to work with our colleagues to prepare a tour that meets the needs and size of your group. For more information, please contact Outreach Services at (760) 744-1150, Ext. 3756 or outreach@palomar.edu. Please visit www.palomar.edu/tours to request any of our tours.

Career Center
SU-17, Ext. 2194
Palomar College Career Center provides student guidance and support with the end in mind. Informed career decisions (career exploration, major declaration, course selection, college identification, and degree completion) can be achieved by accessing and utilizing available career center resources. Career Services include a Career Search class, career assessments, counseling, workshops, job/internship announcements, and employment engagement events.

For more information call 760-744-1150, ext. 2194 or visit our website at www.palomar.edu/counseling/careercenter.

Cashier Services
San Marcos Campus
Administration Building (A-2), ext. 2114
Escondido Center
Student Services Center (1), ext. 8134
Fallbrook Education Center
Student Services Center (A01), ext. 8464
Rancho Bernardo Education Center
Student Services Center (159), ext. 6698 or 6699
The Cashier's Office processes all payments made to Palomar College including tuition and mandatory fees, Parking permits and citations, Student Activity Cards, MTS Regional passes, holds and fines. Students can purchase discount MTS Regional Passes at the Cashier's Office with a current semester Student Activity Card (Only available in Escondido and San Marcos).

For more information about Cashier Services, please visit the web site at http://www2.palomar.edu/pages/fiscalservices/ home/cashier-services/

Counseling Services
SSC-24, 760-891-7511

Academic, career, 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 counseling is available to students seeking assistance with scheduling or clarification of requirements for certificates, graduation, or transfer. Students are encouraged to meet with a counselor each semester to assure careful course selection and to remain current on evolving degree and transfer requirements.

Career guidance is available in the Career Center located in SU-17. Assistance in preparing to transfer is available in the Transfer Center, located in the Student Services Center.

Personal counseling is available to 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.

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

DRC provides academic, vocational and personal counseling, services and specialized instruction for students with physical, learning, vision, hearing, communication, and psychological disabilities.

Services for verified students may include academic, personal and disability management counseling, test accommodations, note taking assistance, mobility assistance, learning disability assessment, deaf and hard of hearing services including real-time captioning and sign language interpreting services, access technology training and instruction, alternate media and related training, faculty training and support, priority registration, special parking, and accessible and specialized furniture.

Supportive instruction includes courses in English, assistive technology, and college success.

DRC's Access Technology Center (ATC), located in the first floor of the Library/Learning Resource Center (LRC) provides direct instruction in various access technologies as well as an open noncredit lab featuring access to computers, assistive technology, and support from faculty and staff.

Special equipment includes digital audio recorders, assistive listening devices, and other access technology.

The DRC department acts as an advocate for students with disabilities representing their rights and interests on campus as well as with various state and local agencies, including the State Department of Rehabilitation. Further, the DRC supports faculty in their responsibility to administer approved curriculum accommodations through DRC's Testing Center, located in NA-2, as well as serving as a resource and consultant.

Call the DRC for further information at 760-744-1150, ext. 2375, or visit our website at www.palomar.edu/drc.

For questions regarding academic accommodations, please see "Academic Accommodations for Students with Disabilities" in Section 4 of this catalog.

Early Childhood Education Lab School
ECELS Bldg., San Marcos Campus, Ext. 2575
Escondido Center, Ext. 8155

The Early Childhood Education (ECE) Lab School offers infant, toddler, preschool, and transitional kindergarten programs.

The ECE Lab School in San Marcos provides services to approximately 130 children ages 6 months through transitional kindergarten. The ECE Lab School receives funding from the California Department of Education and from parent fees. The ECE Lab School serves children of Palomar College students, faculty, staff, and community members. The ECE Lab School 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 ECE Lab School in San Marcos is open from 7:00 a.m. to 5:45 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 and community members at no or low cost, based on family size and income.

The ECE Lab School in Escondido has four state preschool programs. These programs are three hours and fifteen minutes long, five days a week, and are funded to provide preschool experiences to children before kindergarten. The programs are available to children of any family within our community who are low-income and meet the guidelines set forth by the California Department of Education.

Extended Opportunity Programs and Services EOPS/CARE
AA-141, Ext. 2449
Email: eopsadmin@palomar.edu
Website: www.palomar.edu/eops

EOPS is a state-funded program intended to enhance educational access, student retention, and academic and personal success for students who are economically and educationally disadvantaged. The services offered are "over and above" those provided to the general student population and include counseling (academic, career, transfer, financial aid, and personal), priority registration, student success workshops, and support with transition to four-year universities or the workplace. Services may also include book vouchers, school supplies, and financial assistance, depending on available funding.

Eligibility
Students may be eligible for EOPS if they meet the following criteria:
1. Must be a California Resident or AB 540 Eligible
2. Must be enrolled in 12 or more units
3. Must have completed fewer than 49 degree-applicable units
4. Must be eligible for the California College Promise Grant (CCPG) A, B, or C with Zero EFC

Additionally, students must meet one of the following criteria:
- Currently or previously enrolled in remedial or developmental coursework
- No high school diploma or GED
- An overall high school GPA below a 2.5
- First generation college student (neither parent has a bachelor's degree)
- Emancipated Foster Youth
- English is/was not the primary language spoken at home

How to Apply

Students interested in applying for EOPS should complete an EOPS Application as well as the Free Application for Federal Student Aid (FAFSA). Completed EOPS applications should be returned to AA 141 and include official transcripts from any previously attended college, a current enrollment summary, and proof of CCPG eligibility.

CARE
AA-141, Ext. 2449
Email: eops-care@palomar.edu
Website: www.palomar.edu/eops/care
EOPS students who are single head of household and receiving cash aid (CalWORKs/TANF) for themselves or their children may be eligible for the Cooperative Agencies Resources for Education Program (CARE). CARE students are eligible to receive additional benefits intended to meet the unique needs of single parents. Benefits may include specialized workshops, meal vouchers, school supplies, transportation support, and additional financial assistance.

CalWORKs
AA-141, Ext. 2449
Email: calworksdept@palomar.edu
Website: www.palomar.edu/calworks
The CalWORKS program offers support to students receiving cash aid (TANF/CalWORKs) and provides specialized services to parents who are attending school as part of their welfare-to-work plan with the county. Participants must also be working toward a certificate, AA degree, transfer to a four-year university, or to improve vocational skills. Benefits include: academic and support counseling, priority registration, student success workshops, work study placement, and verification of welfare to work hours. Students do not have to be full-time to receive benefits.

FYRST
AA-141, Ext. 3090
Email: fosterhelp@palomar.edu
Website: www.palomar.edu/fosteryouth
Our Foster Youth Retention Success and Transition or FYRST program is designed to provide a sense of belonging and purpose for current and former foster youth enrolled at Palomar College. Students interested in applying for the FYRST program must meet the following criteria:
- Must have been in foster care on or after his/her 13th birthday
- Must provide a verification of dependency letter documenting foster care placement
- Must be enrolled in at least 6 units
- Must be under the age of 26

Eligible students will benefit from individualized counseling focused on personal and academic success, student workshops covering topics such as independent living and financial literacy, priority registration, advocacy, and connection to community resources. Application information can be found on our website.

Financial Aid & Scholarship Services (FAVSS)
SSC-50, 760-891-7510
Palomar College participates in various federal and state programs that provide its students financial assistance to pay for their educational costs for pursuing an academic program at the College. We provide waivers, grants, scholarships, part-time employment and student loans to eligible students. Please visit our webpage for detailed information on applications, initial and continuing eligibility, financial assistance programs, deadlines and forms. For general financial aid questions email us at finaid@palomar.edu or contact our office via telephone. Current students should email us from their Palomar College email account and include their Palomar College student ID number in the message. You may stop by our office if you have concerns or questions related to your specific circumstances. To protect your privacy, valid government issued identification will be required to release student specific information. We can provide only limited award and application details over the phone. Please see https://www2.palomar.edu/pages/enrollmentservices/student-rightsprivacy-student-records/ for FERPA information.

Please be advised official financial aid communications will be emailed to your Palomar College student email account.

The Free Application for Federal Aid (FAFSA) is required to determine eligibility all federal aid programs. The FAFSA is also used to determine eligibility for state programs and Palomar College scholarships. The FAFSA is available to all U.S. citizens and eligible noncitizens. Apply online at https://fafsa.ed.gov/.   Eligibility details are available at https://studentaid.ed.gov/sa/eligibility/basic-criteria.

The California Dream Act Application (CADA) is available for eligible students unable to submit a FAFSA and is used to determine eligibility for state financial assistance programs and Palomar College scholarships. The CADA is available online at https://dream.csac.ca.gov/. Eligibility details are available at http://www.csac.ca.gov/dream_act.asp.

California College Promise Grant (CCPG)
Formerly known as the Board of Governor Fee Waiver (BOGW) program, CCPG waives the enrollment fees for eligible California residents and qualified AB540 and AB 1899 students (determined by Enrollment Services). Residency information and forms are available at Enrollment Services, in the student services Center or online at https://www2.palomar.edu/pages/enrollmentservices/residency/. Initial eligibility and awards for CCPG will be made using official FAFSA or CADA and admissions data. Eligible students not already awarded a CCPG may apply online through their eServices link "Apply for a California College Promise Grant" located under the Financial Aid section of their Student Center page. Students not meeting academic eligibility may apply for reinstatement for CCPG via appeal. For additional information see Enrollment Services.

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. Students must have a minimum enrollment of six (6) units.

Full Time Student Success Grant (FTSSG)

This is a California state-funded program. It is awarded to students who are enrolled in Full-Time units and who have also been awarded either a Cal Grant B or Cal Grant C.

Community College Completion Grant (CCCG)

CCCG is designed to encourage faster completion of an eligible degree or certificate. Students receiving a Full-Time Student Success Grant (FTSSG) may also be awarded the CCCG if they are on track to complete their academic program of study on time and maintain at minimum a 2.00 cumulative grade point average (GPA). For example, students pursuing an associate degree must be able to complete the program in two (2) years which generally requires enrolling in 15 units per semester.

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, except for limited exceptions. Contact the Financial Aid Office for details.

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. Students 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. Students must have a minimum enrollment of six (6) units.

Scholarships

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

The Scholarship Application process runs once a year between January and March. The application can be found on the student's MyPalomar (eServices) account. There are also various Outside Scholarships that are posted on the Outside Scholarship webpage: https://www2.palomar.edu/pages/fa/scholarship1/. Students are encouraged to check our web site at https://www2.palomar.edu/pages/fa/scholarships/ to find out more regarding the Scholarship Application dates and information.

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 set by the Federal government. 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.

IMPORTANT INFORMATION CONCERNING UNSUBSIDIZED LOANS:

Palomar College has been approved by the U.S. Department of Education to participate in an experimental initiative to reduce student loan burden and the risk of loan default. As a result, specific student categories will be unable to borrow unsubsidized loans. For more information please visit Direct Loan Q & A webpage: https://www2.palomar.edu/pages/fa/files/2017/07/2018_DL_QA.pdf.

Out-of-State Deferment

Eligible out-of-state financial aid students may request a no cost deferment to insure that they are not dropped from classes for nonpayment of fees. If approved the deferment will be in place until the eighth (8th) week of the semester allowing nonresident students additional time to pay their fees. This generally requires the student to request an appointment with an advisor to go over financial assistance options including federal student loans to pay for mandatory fees. Both financial aid and non-financial aid students may elect to participate in the Palomar College tuition payment plan instead. Payment plan benefit and cost information is available at http://mycollegepaymentplan.com/palomar/.

Data Matches

Federal student aid applicants are processed using their social security number. The name used on your FAFSA and admissions application must match the name on your social security card to avoid delays in determining your eligibility for student aid.

Students that will submit the CADA should use the name reported to their high school. Make sure this name is also used on your Palomar College admissions application.

Food Services
SU Bldg., Ext. 2232

Dining Services offers a wide range of options for students, faculty, staff, and visitors on the Palomar College Campus.

Comet Café: (located next to the Bookstore) offers a variety of fresh food options in a retail food court environment for guests to choose from. Come visit our very own Subway® for custom made sandwiches and salads the way you like it. Bene Pizzeria offers freshly baked pizza and Italian specialties. Grille Works offers a hot egg breakfast to get you started right in the morning, and a selection of hot grill favorites for lunch, like the Angus burger or Philly Cheese Steak. Greens-to-Go is a custom in-line salad station with a light and healthy variety of freshly prepared items. Kettle Classics provides a daily selection of hot soups. For convenience on the go, the food court also carries an assortment of whole fruit, fountain & bottled beverages, snacks, and ready-to-eat sandwiches and salads made fresh daily on location.

Student Union: Java City® can whip you up a custom hand-crafted Espresso, frozen Javalanche®, Iced Mocha or a feature brewed coffee morning, noon and night. While our very own Jamba Juice® specializes in signature blended fruit & vegetable smoothies, frozen creamy treats, and other health conscious snacks to keep you focused on your studies, and your health.

Convenience Stores: The Snack Shack located at Bldg. RF-1, and the Student Lounge located in ESC-201 at the Escondido Education Center offer an assortment of whole fruit, bottled beverages, coffee, snacks, and ready-to-eat sandwiches for students, faculty & staff.

Catering Services: Available for On-Campus Events with an array of food and beverage selections designed to meet a variety of needs. We are dedicated to providing you with the highest quality of catering services, from a simple coffee break, or meeting snack to full receptions and banquets. Please visit our website http://www.palomarcollege.catertrax.com to place your next order, or call us at x2232 to inquire."

GEAR UP
TCB-4, Ext. 3680
GEAR UP (Gaining Early Awareness and Readiness for Undergraduate Programs) is a Palomar College educational partnership grant program with the Fallbrook Union Elementary School District Fallbrook Union High School District, Vista Unified School District, and Valley Center-Pauma Unified School District. GEAR UP currently is supporting students at Potter Junior High, Valley Center Middle School, Pauma School, Rancho Minerva Middle School, Vista Innovation & Design Academy, Fallbrook High School, Valley Center High School, Vista high School, and Rancho Buena Vista High School.

GEAR UP staff work with students in the graduating classes of 2022 and 2023, 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 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, and 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-to-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 service 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 760-744-1150, ext. 3680, or visit our web site at www.palomar.edu/gearup.

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 250 international students enrolled each year, representing over 30 countries. The Office of International Education administers specialized orientation and assessment sessions for their students, as well as offering 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.

Library Services
Call the Library, Ext. 2612
The Library is located at the San Marcos campus and at the Escondido, Fallbrook, and Rancho Bernardo Centers. The Library provides Palomar College students, faculty and staff with over 135,000 books, periodicals, and media resources in all subjects and disciplines. Students have access to millions more full-text journal articles, ebooks, and streaming films both on- and off-campus through the Library's online research databases. On-site reference and research assistance is available from faculty librarians during business hours, or online 24/7 through the Ask-A-Librarian chat service. Additionally, the Library offers a number of other programs and services to help students succeed at Palomar, including class textbooks for in-library use, online tutorials, research classes and interlibrary loan of materials from other libraries. Free campus wifi and internet-connected computers are available for use at no charge, and self-service photocopiers and printers provide low-cost printing and copying options. All online resources and information about Library programs and services may be found using the Library's website: http://www2.palomar.edu/pages/library. You can send emails to library@palomar.edu.

Puente
The Puente program is a national-award winning program that has helped thousands of students transfer to a university, earn degrees, and return to the community as leaders and mentors to future generations. Puente students commit to two consecutive semesters of English (Eng 50 or 50A and Eng 100) instruction, Counseling (Coun 110 & Coun 101), and mentoring. For additional information, please visit http://www.palomar.edu/puente

Student Life & Leadership
SU-201, Ext. 2594
The Office of Student Life & Leadership is committed to enhancing your college experience; encouraging students to become actively engaged within the campus community and beyond. Student Life & Leadership encompasses providing basic need resources, food assistance, activity card benefits, promoting student engagement in clubs and assisting the Associated Student Government (ASG). Additionally, the office student conduct and student grievances. The Anita & Stan Maag Food & Nutrition Center, Access & Engagement Center and the Basic Needs Hub are housed within Student Life & Leadership website https://www2.palomar.edu/pages/studentlifeandleadership/

The Anita & Stan Maag Food & Nutrition Center
SU-40A, Ext. 7540
The Food & NutritionCenter is committed to supporting a healthy and safe environment for our campus community. The Food & Nutrition Center has provided expanded hunger relief since 1983. Students or staff are also eligible to sign up for the free diaper program. Limited Food & Nutrition services are also available at our Rancho Bernardo, Escondido and Fallbrook Education Centers.

For emergency food and/or personal care items after hours, contact the Palomar College Police Department at 760-891-7273. For more information about programs and events, visit SU-40 or visit our website at https://www2.palomar.edu/pages/studentlifeandleadership/food-and-nutrition-center/

Basic Needs Hub (The Hub)
SU-22, Ext. 2821
The Hub is a valuable resource for programs and services to connect students with food, housing and financial security. The Hub serves as a safe place to relax and to be connected with on- and off-campus resources. For more information please visit SU-22 or The Hub website: www2.palomar.edu/pages/studentlifeandleadership/thehub-2/

Success, Equity, Advocacy & Leadership (SEAL Center)
SU-18, Ext. 2846
The SEAL Center provides an engaging meeting space for all students and clubs to meet. The SEAL Center hosts Movie Days through the Student Life & Leadership Office as well as various events hosted by clubs or campus partners. To reserve this space, please contact the Access & Engagement Center at 760-744-1150 x2846. For more information please visit SU-19 or our website: www2. palomar.edu/pages/studentlifeandleadership/

Access & Engagement Center (A&E)
SU-19, Ext. 2846
The A&E serves students by providing the sale of student activity cards and student benefits such as printing, scantrons, copying services and exam books. The A&E Center also facilitates reservation requests to utilize the SEAL Center in SU-18 as well as monitoring use of equipment through the club storage. For further details please visit SU-19 or call the Access & Engagement Center at 760-744-1150 x2846

Associated Student Government (ASG)
SU-202/203, Ext. 3766
(ASG) is a representation of the official student organization. ASG represents and advocates for the student body by engaging the shared governance committees in a student-centered focus. Additionally, ASG focuses on promoting student life, engagement and retention through campus events. Join your ASG today to make a difference and have the opportunity to travel for legislative affairs. For more information on how to get involved, visit SU-202/203 or the ASG website: www.palomar. edu/asg/

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. 3766 or 2594.

Student Life & Clubs
SU-201, Ext. 2594
Clubs provide students with opportunities for enhancing their personal, social, recreational, religious, cultural and civic development. Students who wish to get involved in a club have the ability to network with other students, develop leadership skills and feel a sense of community while on campus. The student clubs are vital to promoting student life on campus and coordinating events. Each academic year, clubs will have to complete a reinstate packet through the Office of Student Life & Leadership. For further details on clubs, please contact the Student Activities Coordinator 760-744-1150 x7509 or visit the website: https://www2.palomar.edu/pages/studentlifeandleadership/how-to-start-a-club/

Student Health Centers
HC Bldg. 760-891-7530
Student Health Services provides easy access to initial primary care, acute illness and injury assessment and treatment, health education and wellness programs at the San Marcos campus and Escondido Center. Students, whom are currently enrolled and have paid the health fee (G.B. Policy 5030.3 under Tuition and Fees Schedule), are provided free of charge visits with a physician, nurse practitioner or registered nurse. Visits are mostly scheduled by appointments but also are available on an emergency/walk-in basis, as needed. Most services, including Nursing, Primary Care, and Behavioral Health Counseling, are now available via telehealth formats, including secure video and telephone appointments.

Fee services include: a variety of physical exams to include: athletic sports, medical programs admission (nursing, dental assisting, EMT, Paramedic, Firefighting and Police Academies), child development, DMV; immunizations (including TB testing); specialize exams/procedures (e.g. Pap, wart removal); specialized treatments (bandaging, respiratory treatment); limited prescription medications; vision and hearing testing and laboratory testing. Areas of service include respiratory, dermatology, gynecology, family planning, tobacco/nicotine cessation and limited emergency medicine.

Health education and wellness programs are offered through the year to promote and enhance healthy lifestyle choices and well-being. Typical programs offered are Sexual Responsibility Awareness, Breast, and Skin Cancer Awareness, Great American Smoke-out, Flu Vaccination (free to students), Alcohol and Drug Abuse Awareness, Healthy Heart Month, Stress Reduction, Healthy Mind/Suicide Prevention and Infectious Disease Awareness. Other community services provided on a quarterly basis include Blood Drive, Mobile Medical Van Services that includes Dental Screening, Mammogram, Women's Health Services and Medical Insurance Enrollment Seminars.

The San Marcos Student Health Center is located in the HC Bldg., which is south of the NS building at the north end of the campus, with operational hours Monday- Thursday 8 a.m. to 4:30p.m. and Friday 8 a.m. to 3:30 p.m. during the Fall and Spring semesters. Appointments can be made by calling 760-891-7530. The Escondido and Rancho Bernardo Student Health Center hours vary; please call 760-891-7530 for appointment availability. The Student Health Centers webpage is www.palomar.edu/ healthservices.

Behavioral Health Counseling Services provides students, whom are currently enrolled and have paid the student health fee, short term counseling visits (free of charge) with a licensed Behavioral Health Counselor/Therapist. Typical counseling services provided include: assessment and treatment of anxiety and depression, substance abuse and addiction, emotional trauma, body image disorders, significant relationship and family conflicts, assessment and diagnosis of mental health disorders. The number of counseling sessions are determined by a clinical assessment and the BHCS counselor/supervisor. A "no show" fee of $5.00 will be charged for an appointment not attended or not cancelled prior to the scheduled appointment time.

Behavioral Health Counseling is available at the San Marcos campus in the NB building, room 2 and at the Fallbrook, Escondido, and Rancho Bernardo Centers by appointment only (hours varied). Appointments for all locations are made by calling the San Marcos location at 760-891-7531. The Behavioral Health Counseling webpage is: www2.palomar.edu/pages/bhcs/home-page-2/services/

Student Equity & Achievement
SSC-25, Ext. 3624

Palomar College is committed to achieving equity in educational outcomes for all students in the areas of access, course completion, degree attainment, and transfer to four-year universities. An analysis of student data revealed disproportionate impact among veterans, foster youth, Latino and African American males, and students with disabilities. Our Student Equity Plan describes ongoing efforts to address equity challenges with targeted interventions, increased student support services, and enhanced equity dialogue.

Starfish Early Alert
Palomar College is dedicated to helping students meet their academic goals. Starfish is a student success "early alert" initiative at Palomar College designed to support students throughout their Palomar experience.

Students may receive emails or "alerts" through their Palomar email from professors. Alerts may include updates regarding course progress or referrals to key campus resources. Students are encouraged to pay attention to these emails. The goal of this new alert system is to support the academic and personal success of students at Palomar College.

Teaching & Learning Center Escondido
ESC-500, Escondido Center, Ext. 8171
The Teaching and Learning Center (TLC) opened in Palomar College's Escondido Education Center in August 2009. The TLC is a multi-functional space which provides a place for students to receive tutoring and to study, meet with other students or instructors, speak to a counselor, and/or attend workshops.

Designed to be a pleasant working space for students, the TLC has three study rooms where students can work in groups or meet with a counselor and/or faculty. Students who have used the TLC describe it as a pleasant and comfortable place to study and a place where they can receive any assistance they need. The TLC is located at the Palomar College Escondido Education Center, 1951 East Valley Parkway, Escondido, CA 92027.
Visit our website at www.palomar.edu/tlc/escondido.

Teaching and Learning Center San Marcos
TLC-100, San Marcos Campus, Ext. 3931
The San Marcos TLC (Teaching and Learning Center) is a state-of-the-art multi-functional space which provides students with ample study space, including a large central study area, three private study rooms, computers and a contemporary classroom designed to promote interactive and collaborative learning.

The Faculty Resource Center provides a place for faculty to discuss issues and share ideas to help students succeed (i.e. exploring and developing new teaching strategies, especially as they relate to our basic skills and at-risk student population, and participating in professional development activity offerings).

The TLC houses the First-Year Experience program, Summer Bridge, Learning Communities, Faculty Resource Center, and Village Mentoring. The TLC is located at the Palomar College San Marcos campus, 1140 West Mission Road, San Marcos, CA 92069. Visit our website at www.palomar.edu/tlc/sanmarcos.

Transfer Center
SSC-24A, Ext. 2552
The Transfer Center provides up-to-date information regarding successful transfer to all four-year universities.

Cross-enrollment processing, assistance with university applications, Transfer Admissions Guarantees (TAGs) to 6 UC universities and the opportunity to schedule appointments with visiting four-year representatives are some of the services available to assist students.

Students interested in transferring should plan in advance to understand the critical transfer and application procedures and filing periods. For information on transferring requirements, deadlines and forms, visit the Transfer Center website at https://www2.palomar.edu/pages/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 four are hosted at Palomar College under Grant Funded Student Programs. These are Student Support Services, North County Educational Opportunity Center (NCEOC), Upward Bound, and Educational Talent Search. Visit our web site at www.palomar.edu/grants.

TRIO/Student Support Services
TCB-1, 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, 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 email at triosss@palomar.edu or visit our web site at www.palomar.edu/triosss.

TRIO/North County Educational Opportunity Center
ST-26, Ext. 2434 or Main Lobby, Room 6, Escondido Education 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's staff provides 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
ESC-4, Escondido Education Center, Ext. 8118

TRIO/Upward Bound at Palomar College helps 125 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, San Pasqual, Vista, Rancho Buena Vista, and Fallbrook. 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. 8118, or visit us at www.palomar.edu/upwardbound.

TRIO/Educational Talent Search
Escondido Education Center, ESC-810, Ext. 8131

TRIO/Educational Talent Search at Palomar College helps 500 local area middle school and high school students be more academically successful in school, while preparing for higher education choices. Participants receive tutoring/mentoring and academic advising at Palomar College, after school, on Saturdays, and during the summer.

In order to participate in TRIO/Educational Talent Search, students must be enrolled in the following high schools: Mission Middle, Del Dios Middle, Hidden Valley Middle, Escondido High, or Orange Glen High. The program provides academic/career advising and financial aid and financial literacy information to its participants, and encourages them to graduate from high school and continue on and complete their postsecondary education.

The Educational Talent Search program hires Palomar College students and staff/faculty to serve as tutors, mentors, and Saturday instructors. Anyone interested should contact the ETS office, 760-744-1150, ext. 8131, or visit us at www.palomar.edu/ets.

Tutoring Resources
Locations and Services

Palomar College STAR Tutoring Center
LRC-105, Library, 1st Floor, San Marcos Campus, Ext. 2448

In the Palomar College STAR Tutoring Center, located in LL-105, tutors are available for 30-minute tutoring sessions. The Tutoring Center provides tutoring in the following subjects: Math, English, ESL, Sciences, Business & Accounting, and Social Sciences. Hour-long appointments are available for EOPS and TRiO students. Students are served on a walk-in basis, and must be registered for the course(s) for which they seek assistance. Visit our website for more information, www.palomar.edu/tutoring.

Math Learning Center (MLC)
MC-1, San Marcos Campus, Ext. 2718
Walk-in tutoring is available in all levels of mathematics. Enrollment in subject area (math) is required. Access to computers, GoPrint, calculators, study space, and usage of some textbooks in the Math Center is also available.

Room: MC-1, San Marcos campus, 760-744-1150, ext. 2718
http://www2.palomar.edu/pages/math/mlc/

Fall and Spring Hours: Monday through Thursday, 8 a.m. to 8 p.m, Friday, 8 a.m. to 2 p.m, Saturday 9 a.m. to 12 p.m.
Summer Session Hours: Monday through Thursday, 8 a.m. to 3 p.m.

English Department Writing Center
H-102, San Marcos Campus, Ext. 2778
The English Department Writing Center, located in room H-102, offers help with any phase of the writing process regarding assignments for any Palomar College class that students are enrolled in. To work with a Writing Tutor, call extension 2778 to make an appointment; walk-in students are also served as tutor availability allows. The Writing Center is open Monday-Thursday, 8:00 a.m. to 5:30 p.m., and Friday, 8:00 a.m. to 2:00 p.m. Writing tutors are also available at the Escondido Education Center TLC (call extension 8171 for exact hours). Visit our website for more information, www.palomar.edu/english/Writing_Center/.

ESL (English as a Second Language) Tutoring Center
H-118, San Marcos Campus, Ext. 4482
Tutoring in English as a Second Language (ESL) is available at the San Marcos and Escondido Education Center campuses. At San Marcos, tutors are available in H-222, Monday through Saturday (call ext. 4482 to schedule an appointment). At the Escondido Center campus, tutors are available for drop-in visits at the TLC, Monday through Thursday. ESL instructors interested in having a tutor in their classes can contact the ESL Tutoring Coordinator. For more information about ESL tutoring, call ext. 4482 (San Marcos) or ext. 8171 (Escondido), or visit our website, www.palomar.edu/esltutoring.

STEM (Science, Technology, Engineering, Mathematics) Center
NS-312, San Marcos Campus, Ext. 2265
The STEM Center provides a variety of services including free tutoring, independent study space, specific STEM counseling and CSUSM STEM advising, computer use, access to pay-per-print station, laptops, and reference materials available for checkout. Tutoring is available for chemistry, earth science, engineering, life science, physics, and some math and other STEM courses. These services are available to all Palomar College students at no cost. Tutoring is offered on a walk-in, first-come, first-served basis.

Fall and Spring hours: Monday through Thursday, 8:00 a.m. - 6:00 p.m., and Friday, 8:00 a.m. - 3:00 p.m. Summer schedule will vary.

To find out more about our services and to see a copy of the tutoring schedule, please visit our website at www2.palomar.edu/stem/.

Teaching & Learning Center Escondido
ESC-500, Escondido Center, Ext. 8171
The Teaching and Learning Center (TLC) in Escondido provides free tutoring in Math, ESL, English/Writing and Spanish to all registered students of Palomar College. Tutors are available Monday through Friday. There is no need to make an appointment since all of our tutors can be seen on a walk-in basis. Simply stop by the front desk at the TLC and let one of the staff know that you need to see a tutor. The TLC is located at our Escondido Center at 1951 E. Valley Parkway, ESC-500, Escondido, CA 92027; phone: 760-744-1150, ext. 8171.

World Languages Resource Center (WLRC)
H-125, San Marcos Campus, Ext. 2564
The World Languages Resource Center offers tutoring, language resources, and assistance to students studying Arabic, Chinese, French, German, Italian, Japanese, and Spanish. Enrollment in the subject area is required. The center is located in the Humanities Building, room H-125 on the San Marcos campus. For hours and information, please call 760.744.1150, ext. 2564 or visit: http://www.palomar.edu/worldlanguages.

Veterans' Services
ST-52, Ext. 2173
The Veterans' Resource Center, located in the Student Services Center, provides information on veterans' education benefits and services, and helps military affiliated students with applications and forms needed to collect their VA Education Benefits.

The Veterans' Resource Center provides a place for studying, computer and printer use for class work, and a chance to hang out with other military affiliated students. For more information, access the Veterans' Resource Center webpage, www.palomar.edu/veterans/.

New students are required to:
1. Complete the Palomar College Application for Admission.
2. Official transcripts from all previous schools, colleges, military training (JST or CCAF) and CLEP tests must be submitted to Palomar College for official evaluation prior to meeting with a VA Counselor.
3. Select a major and make a counseling appointment with the Financial Aid/Veterans' Academic Counselor to obtain an education plan and declaration of major.
4. Register for classes. Students are responsible for paying their registration fees (excluding Chapter 33, 33D, and 31 – these students MUST fill out a Benefits Coding Request prior to enrollment to prevent being dropped for non-payment).
5. Submit a copy of their education plan and declaration of major to the Veterans' Resource Center after they have registered in their classes. Students will fill complete a certification request and any additional paperwork as needed at this time.

It is strongly recommended that students certify their enrollment with the Veterans' Resource Center during priority enrollment for the upcoming term. It could take eight to twelve (8 to 12) weeks for processing of VA Educational claims at the Muskogee Regional VA Processing Office.

VA benefits are determined based on attendance in class(es) required for the degree declared to the VA on file. Any changes to a student's schedule must be reported to the Veterans' Resource Center and to the VA promptly. Failure to notify the Veterans' Resource Center of schedule changes could result in an overpayment to the student and debt owed to the VA.

The above paragraphs do not include all information, and requirements and resources available to military affiliated students. Students may contact the Veterans' Resource Center or view the department's website for additional information.

California Veteran Dependent Exemption (Enrollment Fee Waiver)

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. The student must submit the VA letter of eligibility to the Financial Aid and Scholarships Office. The CA Veteran Letter will indicate the Enrollment Fee Wavier school year. The year begins with Fall, followed by Spring, and ends with Summer. Once a semester ends, there is no retro for the semester even if the letter is dated prior to the end of the semester or for the school year. For more information see the Veterans' Services office.

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.

Servicemembers Opportunity Colleges Consortium

Palomar College is a member of the Servicemembers Opportunity Colleges (SOC) Consortium. The SOC Consortium consists of colleges and universities committed to expanding and improving voluntary postsecondary educational opportunities for servicemembers worldwide. SOC Consortium members subscribe to principles and criteria to ensure that quality academic programs are available to active-duty military students, their family members, and veterans. A list of current SOC Consortium member institutions can be found on the SOC website at www.soc.aascu.org/.

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.

SOC Degree Network System

Palomar College is a member of the SOC Degree Network System, a subgroup of SOC Consortium member institutions selected by the military Services to deliver specific associate and bachelor's degree programs to servicemembers and their families. As a member of the DNS, we have agreed to adhere to academic policies intended to support military students in their academic endeavors towards degree completion.

SOC operates the 2- and 4-year Degree Network System for the Army (SOCAD), Navy (SOCNAV), Marine Corps (SOCMAR), and Coast Guard (SOCCOAST). Palomar College is approved to offer SOCNAV and SOCMAR programs at the associate degree level. For more information, contact the Palomar College Camp Pendleton Center at 760-725-6626.

RIGHTS & RESPONSIBILITIES

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 Accommodations for Students with Disabilities

The Palomar Community College District (PCCD) is committed to all provisions of Section 504 of the Rehabilitation Act of 1973, the Americans with Disabilities Act (ADA) of 1990, and Section 508 of the Rehabilitation Act of 1973. Students with verified disabilities who may require academic adjustments or auxiliary aids are advised to contact the Disability Resource Center (DRC). It is strongly recommended that students complete the intake process with a DRC Counselor well before classes begin to ensure timely provision of services. For further information regarding academic accommodation procedures, please contact DRC at 760-744-1150, ext. 2375 or visit our website at www.palomar.edu/drc. Questions regarding academic accommodations may also be directed to the College ADA Officer at 760-744-1150, ext. 2154.

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 predict ability, 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

According to B.P. 3550, 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 Code of Conduct may be found on the Student Life & Leadership web page at: https://www2.palomar.edu/pages/studentlifeandleadership/home/policies/ and is also available in the Office of Student Life & Leadership, SU-201.

FERPA and Privacy Rights of Students

The Family Educational Rights and Privacy Act (FERPA) affords students certain rights with respect to their education records. These rights include:

   (1) The right to inspect and review the student's education records within 15 working days of the day the College receives a request for access.

Under Section 76230 of the Education Code, current and formerly-enrolled students have an absolute right of access to their own records. One exception is that under Section 76231 of the Education Code, students may waive their right of access to confidential reference letters.

A student has access to review his/her own record by submitting a request directly to the Records Office. Palomar College will provide the opportunity to inspect and review the student's record within 15 working days. Students may give permission to receive a personal transcript or have the transcript sent to another individual or institution. Parents of minor and non-minor students do not have access, except when written permission is received from the student.

   (2) The right to request the amendment of the student's education records that the student believes are inaccurate, misleading, or otherwise in violation of the student's privacy rights under FERPA.

Students may file written requests with the Admissions Office to correct or remove information recorded in their student records as described in the Administrative Procedure (AP 5045). Within 30 days of receipt of the request, the Admissions Office shall meet with the student and the employee who recorded the information in question, if any, if the employee is presently employed by the District. The Admissions Office shall then sustain or deny the allegations.

If the Admissions Office sustains any or all of the allegations, the subject information shall be corrected, removed, or destroyed as applicable. If the Admissions Office denies any or all of the allegations and refuses to order the correction or removal of the information, students, within 30 days of the refusal, may appeal the decision in writing to the Academic Review Committee for academic issues, the Financial Aid Appeals Committee for student financial aid record issues, or the Director of Student Life & Leadership for disciplinary record issues.

A final appeal may be made to the Governing Board. The Governing Board shall, in closed session with the student and the employee who recorded the information in question, determine whether to sustain or deny the allegations. If the Governing Board sustains any or all of the allegations, it shall order the Superintendent/President or his/her designee, to immediately correct or remove and destroy the information. The decision of the Governing Board shall be final.

If the final decision is unfavorable to the student, the student shall have the right to submit a written statement of his/her objections to the information. This statement shall become a part of the student's record until the information objected to is corrected or removed.

Whenever there is included in any student record information concerning any disciplinary action, the student shall be allowed to include in such record a written statement or response concerning the disciplinary action.

Whenever there is included in any student record information concerning any disciplinary action in connection with any alleged sexual assault or physical abuse, or threat of sexual assault, or any conduct that threatens the health and safety of the alleged victim, the alleged victim of that sexual assault or physical abuse shall be informed within three days of the results of the disciplinary action and the results of any appeal. The alleged victim shall keep the results of that disciplinary action and appeal confidential.

   (3) The right to provide written consent before the College discloses personally identifiable information from the student's education records except to the extent that FERPA authorizes disclosure without consent.

No instructor, official, employee, or member of the Governing Board shall authorize access to student records to any person except under the following circumstances:

Student records shall be released pursuant to a student's written consent.

"Directory information" may be released in accordance with the definitions in BP 22 5040 titled Student Records and Directory Information. Directory information is maintained which includes name, address, telephone number, date of birth, and class schedule information. Student degrees and awards may be publicized to recognize scholastic and athletic achievements in the school newspaper, or to the news media. Lists may be provided to other Palomar College departments or to colleges and universities for the expressed purpose of providing educational opportunities and financial assistance to students (names and addresses only).

Student records shall be released pursuant to a judicial order or a lawfully issued subpoena. Each student whose record is requested under a subpoena is notified in advance of compliance and will be offered an opportunity to introduce a motion to quash.

Student records shall be released pursuant to a federal judicial order that has been issued regarding an investigation or prosecution of an offense concerning an investigation or prosecution of terrorism.

The Federal Solomon Act requires colleges to release full directory information (including address) to U.S. Armed Forces.

Student records may be released to officials and employees of the District only when they have a legitimate educational interest to inspect the record.

   (4) The right to file a complaint with the U.S. Department of Education concerning alleged failures by the college to comply with the requirements of FERPA. The name and address of the Office that administers FERPA is:

Family Policy Compliance Office
U.S. Department of Education
400 Maryland Avenue, SW
Washington, DC 20202-5901

As provided for in the Act, a student's personal information can not be released to any other person without the written consent of the student. A photo identification will be required to access information. Official student records are kept in the Office of Admissions and Records. The Director, Enrollment Services has been designated "Record Officer," as required by the Act.

Under Section 49061 of California Education Code, parents of community college students do not have a right of access to their children's student records, regardless of whether the student is under the age of 18. Also, under federal law (Section 1232g of Title 20 of the United States Code), there is a general right of parental access to student records for grades K-12, but not for college students, regardless of age.

Parking and Traffic Regulations

Parking Permits

A permit from the College is required for all vehicles on District property 24 hours a day, seven days a week. The permit must be placed on the rear-view 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 on the San Marcos campus and at the Palomar College Escondido Education Center Enrollment Counter. They may also be purchased online with a credit card via eServices at www.palomar.edu up to one week prior to the beginning of the semester. Once payment has been received and the mailing address confirmed, the permit will be mailed to the student. Online purchase of permits will continue after the mailing cut-off date three weeks into the semester; however, the permits must be personally picked up by the student at the Police Department located in Parking Lot 1, at the main entrance or at the enrollment counter at the Escondido Education Center. Semester permits are only valid from the date of purchase through the expiration date printed on the permits. Refunds for parking permits are granted during the first two weeks of each semester, and thereafter in cases of unusual circumstances which can be confirmed through appropriate documentation.

BOGW-eligible students may purchase a parking permit at a reduced rate. *Only one discounted permit is allowed per semester. If a regular permit is purchased and the student becomes BOGW eligible at a later date, there will be no refund issued.

Students should only purchase a parking permit through authorized sales channels, and the re-sale of parking permits is prohibited. Students who purchase permits from unauthorized sellers may find themselves liable for possessing a stolen or counterfeit parking permit. Citations for using lost/stolen or counterfeit permits will be subject to a fine, and the offender may also be referred to the Office of Student LIfe & Leadership for violation of the Student Conduct Code.

One-day permits may be purchased for $5.00 (fee is subject to change without further notice) from machines located in lots 3, 5, 9, and 12, on the main campus, and at the Escondido Education Center in lots 1, and 3. Permit machines take $1's, $5's, and coins, as well as ATM or credit cards. Permits will be honored in student lots only.

A two-hour visitor permit and an emergency/temporary one-day (limited to one per semester) student permit may be obtained from the Campus Police Office and the Escondido Education Center's Police Storefront. These permits are valid for the designated time period, in designated spaces/lots only, and along 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. Visitor spaces are available for general use, and require payment at the meters and accepts coins, credit and debit cards. 4 hour maximum time limit.

Citations

The Police Department will issue citations to cars that do not display the appropriate parking permits if the cars are parked in spaces designated for handicapped, disabled students, Wellness Center, staff or visitors—this applies to all College parking lots at all times.

Vehicles receiving Palomar College citations have the same legal status as parking citations issued by any other law enforcement agency in California. C.V.C. (California Vehicle Code) and parking permit violations are enforced 24 hours a day/7 days a week. Citations may be satisfied by paying the fine (bail) within 21 days at the San Marcos campus Cashier's Office or the enrollment counter at the Escondido Education Center. 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 pticket.com/Palomar once the citation has been forwarded to the processing center. After 21 calendar days, unpaid citations become delinquent and a late fee equal to the amount of the fine may be assessed. All registered owners are responsible for the citations issued to their vehicle.

Palomar College Police Officers are not authorized to dismiss citations. A formal "Appeals Process" is in place. If you wish to appeal a citation, the forms are available on line at the Police/Parking web page at www.palomar.edu or at the Police Department. The violator shall request the appeal within 21 calendar days of the date of issuance.

Administrative Dismissal of one violation per calendar year may be granted for a "failure to display a valid parking permit" violation. You must show proof of purchase **prior** to issuance (date and time) of the citation. This request will be reviewed by Police Department staff and may be granted at that time. Administrative Dismissals apply equally to all students, faculty and staff members of the Palomar Community College District, and it applies to permit violations only.

For further information regarding citations or regulations, contact the College Police Department at 760-744-1150, ext. 2289 or view the department web page at www.palomar.edu/police.

Police Department

The Palomar Community College District Police Department was established by the Governing Board of the District effective August 28, 1998. The Palomar Community College District 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 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 and secure environment on and near District property.

Weapons on Campus

Firearms or other weapons shall be prohibited on any District property or any facility used for District purposes except for activities conducted under the direction of District officials or as authorized by an official law enforcement agency. (BP 3530)

Firearms, knives with blades longer than 2 ½", explosives, or other dangerous objects, including but not limited to any facsimile firearm, knife, or explosive, are prohibited on all District property or any facility used for District purposes.

The Clery Act: Right to Know

The Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act, or Clery Act requires higher education institutions to give timely warnings of crimes that represent a threat to the safety of students or employees, and to make public their campus security policies. It also requires that crime data be collected, reported and disseminated to the campus community and is also submitted to the Department of Education. The act is intended to provide students and their families, as higher education consumers, with accurate, complete and timely information about safety on campus so that they can make informed decisions by providing:

1. Policy Disclosure
2. Records Collection and Retention
3. Information Dissemination

Hard copies of the Clery Act are available at the Police Department offices located on the San Marcos campus and the Escondido Education Center., and are also available on the Police Department website at www.palomar.edu/police. The Clery Act Report is available to all prospective students and employees upon request. For further information on the Clery Act, please contact the Records Division of the Campus Police Department at 760-744-1150, ext. 3977.

Title IX and Violence Against Women Act (VAWA)

Title IX requires the college to designate a Title IX Coordinator to monitor and oversee Title IX compliance. The Coordinator is available to explain and discuss your right to file a criminal report (for example in cases of sexual violence); the College's reporting process, including the investigation process; how confidentiality is handled; available resources, both on- and off-campus; and other related matters. **If you are in the midst of an emergency please call the Police Department immediately at 760-891-7273.**

VAWA includes the following violations:

Sexual Assault: Includes, but is not limited to, rape, forced sodomy, forced oral copulation, rape by a foreign object, sexual battery, or threat of sexual assault.

Dating Violence: Includes violence committed by a person who is, or has been, in a social relationship of a romantic or intimate nature with the victim. The existence of a romantic or intimate relationship will be determined based on the length of the relationship, type of relationship, and frequency of interaction between the persons involved in the relationship.

Domestic Violence: Includes felony or misdemeanor crimes of violence committed by:
- a current of former spouse of the victim;
- a person with whom the victim shares a child in common;
- a person who is cohabitating with, or has cohabitated, with the victim as a spouse;
- a person similarly situated to a spouse of the victim under California law; or
- any other person against an adult or youth victim who is protected from that person's acts under California law.

Stalking: Engaging in a course of conduct directed at a specific person that would cause a reasonable person to fear for his or her safety, or the safety of others, or to suffer emotional distress.

The following process is to ensure victims of domestic violence, dating violence, sexual assault, or stalking receive treatment and information.

Any survivor of domestic violence, dating violence, sexual assault, or stalking shall be provided with information regarding options and assistance available to them. Information shall be available from the Palomar College Police Department, Human Resource Services, Student LIfe & Leadership, Health Services, and Counseling Services offices. Who shall maintain the identity and other information about alleged sexual assault victims as confidential unless and until the Palomar College Police Department is authorized to release such information.

These areas shall provide all survivors of these crimes with the following, upon request.
- A copy of the District's policy and procedure regarding sexual assault

Services include:
- Facilitate transportation to a hospital, if necessary
- Survivor Advocate and referrals to community resources.
- Notification to appropriate authorities, if desired
- A list of other available campus resources or appropriate off-campus resources.

A description of available services and the departments on campus available to provide or arrange those services if requested.
- Palomar College Police Department
- Health Services
- Office of Student LIfe & Leadership
- Counseling Department and Survivor Advocates
- Human Resource Services
- Student Services Center
- Disability Resource Center

A description of each of the following procedures.
- Criminal prosecution
- Title IX reporting process
- Civil prosecution (for example lawsuit)
- District disciplinary procedures, both student and employee
- Academic Adjustments
- Tutoring, if necessary

Palomar College Title IX Coordinator:
Assistant Superintendent/Vice President of Human Resource Services, Room A-1, 760-744-1150, ext 2531

Palomar College Police Department:
1140 W Mission Rd, San Marcos, Main Entrance, 760-891-7273 or 760-744-1150, ext 2289

Student Life & Leadership:
1140 W Mission Rd, San Marcos, Room SU-201, 760-744-1150, ext 2594

Health Services:
San Marcos Campus: 1140 W Mission Rd, San Marcos, HC Building, 760-744-1150, ext 2380
Escondido Education Center: 1951 E Valley Pkwy, Escondido, 200 Wing, 760-744-1150, ext 8105

Counseling Services:
San Marcos Campus: 1140 W Mission Rd, San Marcos, SSC Building, 760-744-1150, ext 2184

Escondido Education Center: 1951 E Valley Pkwy, Escondido, Student Services, 760-744-1150, ext 8109

Off-Campus Resources:
Women's Resource Center/Hotline, 760-757-3500, 24-hour hotline
Rape Crisis Center, 760-352-7273 (RAPE), 24-hour hotline
San Diego Domestic Violence Council, 888-385-4657 (DVLINKS), 24-hour hotline
Domestic Violence Hotline and Shelter Information, 760-633-1111, 24-hour hotline
Rape and Domestic Violence Hotline, 858-272-1767, 24-hour hotline
Battered Women's Shelter/Hotline, 619-234-3164, 24-hour hotline
Hidden Valley House, 760-747-6282, 24-hour hotline, English/Spanish

Sexual Harassment Policy

It is the policy of Palomar 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, gender, gender identity, gender expression, or sexual orientation 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 measures, 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, the California Fair Employment and Housing Act, the California Education Code Sections 210 through 214, inclusive, and the District's B.P. 3430 and A.P. 3430 Prohibition of Harassment.

The Assistant Superintendent/Vice President, Human Resource Services is responsible for administering this policy. All questions, concerns, and complaints regarding sexual harassment should be addressed to this position. For more information, visit https://www2.palomar.edu/pages/titleixcampussaveact.

Smoking Policy

According to BP 3570, there shall be no smoking or use of tobacco-related products on Palomar Community College District property. The District shall provide and maintain a workplace and learning environment that is smoke and tobacco-free to promote the safety and health of students, employees, and the public. Smoking, vaping, and the use of tobacco products are prohibited on all indoor and outdoor property or in vehicles owned, leased, licensed or else otherwise controlled by the Palomar Community College District. Products covered under this policy include, but are not limited to, cigarettes, cigars, pipes, hookahs, electronic smoking devices, chewing tobacco, spit tobacco, snus, snuff, and dissolvable tobacco products. The existing Student Code of Conduct is available online through the Student Life & Leadership web page at https://www2.palomar.edu/pages/studentlifeandleadership/home/policies/, and is also available in the Office of Life & Leadership, SU-201, or call 760-744-1150, ext. 2594.

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, and 66301; ACCJC Accreditation Standards I.C.8 and 10 (formerly II.A.7.b) 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 Life & Leadership, SU-201, or call 760-744-1150, ext. 2594.

Student Code of Conduct

Student conduct must conform to District and College rules and regulations. Student Discipline Procedures (AP 5520) provide a prompt and equitable means to address violations of the Standards of Conduct, which guarantees to the student or students involved the due process rights guaranteed to them by the California and United States Constitutions.

If a Student Code of Conduct violation occurs while a student is enrolled at Palomar College, he or she may be disciplined. The Standards of Conduct categories of behavior are not intended to be an exhaustive list, but are examples of causes and are good and sufficient causes for discipline, including but not limited to, verbal and written reprimand, removal from class, probation, short-term and long-term suspension or expulsion of a student. Other misconduct not listed may also result in discipline if good cause exists (Education Code, 76034). Whenever it has been determined that "good cause" exists for student discipline, the District shall notify the student in writing and/or district email. The student must attend a scheduled disciplinary hearing to ensure due process rights.

Hearings/Holds

Students failing to meet with the chief administrative officer or designee for a due process hearing will have an administrative disciplinary hold placed on their record until such hearing is conducted.

The Code of Conduct that details the standards is administered by the Director of Student LIfe & Leadership. Also See BP 5030, titled Fees and BP 5130 titled Financial Aid, which addresses consequences of disciplinary action. The complete Student Code of Conduct is available in the Office of Student Life & Leadership, SU-201, or on the Palomar College Student Life & Leadership web page at https://www2.palomar.edu/pages/studentlifeandleadership/home/policies/

Standards of Student Conduct (BP 5500)

According to BP 5500 the following student conduct shall constitute good cause for discipline (academic, administrative or both) including but not limited to the removal, suspension or expulsion of a student, and applies to all students.

1. Cheating, plagiarism (including plagiarism in a student publication), or engaging in other academic dishonesty as defined by the Faculty Senate. Academic sanctions are the sole responsibility of the faculty member involved, further disciplinary sanctions are the purview of the Office of Student Life & Leadership.

2. Causing, attempting to cause, or threatening to cause physical injury to another person including but not limited to sexual assault or physical abuse as listed in AP 3540 Sexual Assaults on Campus.

3. Possession, sale or otherwise furnishing any firearm, knife, explosive or other dangerous object, including but not limited to any facsimile firearm, knife or explosive, unless, in the case of possession of any object of this type, the student has obtained written permission to possess the item from a District employee, which is concurred in by the Police Chief. See AP 3530 Weapons on Campus for further details.

4. Unlawful possession, use, sale, offer to sell, or furnishing, or being under the influence of, any controlled substance listed in California Health and Safety Code Sections 11053 et seq., an alcoholic beverage, or an intoxicant of any kind; or unlawful possession of, or offering, arranging or negotiating the sale of any drug paraphernalia, as defined in California Health and Safety Code Section 11014.5.

5. Committing or attempting to commit robbery, burglary or extortion.

6. Causing or attempting to cause damage to District property or to private property on campus including but not limited to arson and vandalism.

7. Stealing or attempting to steal District property or private property on campus, or knowingly receiving stolen District property or private property on campus.

8. Willful or persistent smoking or vaping in any area where these have been prohibited by law or by regulation of the college or the District. (Refer to AP 3570 Smoking and/or Other Tobacco Use.)

9. Committing sexual harassment as defined by law or by District policies and procedures. (Refer to AP 3540 Sexual Assaults on Campus.)

10. Engaging in harassing or discriminatory behavior based on disability, gender, gender identity, gender expression, nationality, race or ethnicity, religion, sexual orientation, or any other status protected by law. See AP 3430 Prohibition of Harassment and BP 3410 Nondiscrimination for further details.

11. Engaging in intimidating conduct or bullying on District-owned or controlled property, or at District sponsored or supervised functions through words or actions, including direct physical contact; verbal assaults, such as teasing or name-calling; social isolation or manipulation; and cyber bullying. See AP 3430 Prohibition of Harassment and BP 3410 Nondiscrimination for further details.

12. Willful misconduct that results in injury or death or which results in cutting, defacing, or other injury to any real or personal property owned by the District or on campus.

13. Disruptive behavior, willful disobedience, habitual profanity or vulgarity, or the open and persistent defiance of the authority of, or persistent abuse of, college personnel.

14. Dishonesty; forgery; alteration or misuse of District documents, records or identification; or knowingly furnishing false information to the District.

15. Failure to comply with directions of staff members of the District who are acting within the scope of their employment.

16. Engaging in physical or verbal disruption of administrative procedures, public service functions, authorized curricular, co-curricular, and extra-curricular activities or preventing authorized guests from carrying out the purpose for which they are on District property.

17. Unauthorized entry upon or use of District facilities.

18. Lewd, indecent or obscene conduct or expression on District-owned or controlled property, or at District sponsored or supervised functions.

19. Engaging in expression which is obscene, libelous or slanderous, or which so incites students as to create a clear and present danger of the commission of unlawful acts on District premises, or the violation of lawful District regulations, or the substantial disruption of the orderly operation of the District.

20. Persistent, serious misconduct where other means of correction have failed to bring about proper conduct.

21. Unauthorized preparation, giving, selling, transfer, distribution, or publication, for any commercial purpose, of any contemporaneous recording of an academic presentation in a classroom or equivalent site of instruction, including but not limited to handwritten or typewritten class notes, except as permitted by any District policy or administrative procedure.

22. Violations of District policies and regulations, including, but not limited to, regulations and policies related to smoking/vaping on campus, parking or driving on campus, district computers, telecommunications, campus vehicles, and any and all other District equipment and policies and regulations related to student organizations and student and visitor symbolic expression.

Discipline

Students who engage in any of the above are subject to the procedures outlined in AP 5520 titled Student Discipline Procedures.

Consequences for Violations of the Student Code of Conduct.

This section provides due process regarding the possible consequences and/or sanction for violations of the Palomar College Student Code of Conduct, including incidents of academic dishonesty. Disciplinary sanctions may include:

    A. VERBAL REPRIMAND

    B. WRITTEN REPRIMAND

    C. REMOVAL FROM CLASS: Academic sanctions by a District instructor for good cause from class for the day of removal, and the following class meeting. The instructor's decision is final, and may not be appealed. Instructors must notify the Office of the Director of Student LIfe & Leadership when this sanction is utilized so that accurate records can be maintained, and repeat offenders will be identified. (California Education Code, Section 76032)

    D. SHORT-TERM SUSPENSION

    E. LONG-TERM SUSPENSION

    F. EXPULSION

    G. APPEAL RIGHTS

The Director of Student Life & Leadership, Department Chairpersons and Division Deans should be considered resource personnel for students and staff desiring additional information or assistance with this policy.

Loss of Financial Aid

In accordance with Education Code section 69810 a student who disrupts the peaceful conduct of the activities of the campus including but not limited to those listed above may become ineligible for state financial aid if found to be in violation of Standards of Student Conduct.

Students may contact the Office of Student LIfe & Leadership or Governing Board Office if they wish to obtain a copy of specific Education Code sections.

Student Grade Disputes

According to Title 5, Section 55025, "The determination of the student's grade by the instructor shall be final in the absence of mistake, fraud, bad faith, or incompetency." Students who wish to dispute a final course grade under the criteria listed above must follow the Student Grade Dispute Policy and Procedures, which can be found on the Office of Instruction website at www.palomar.edu/instruction/. All grade disputes must be initiated within one semester of the grade in question being issued.
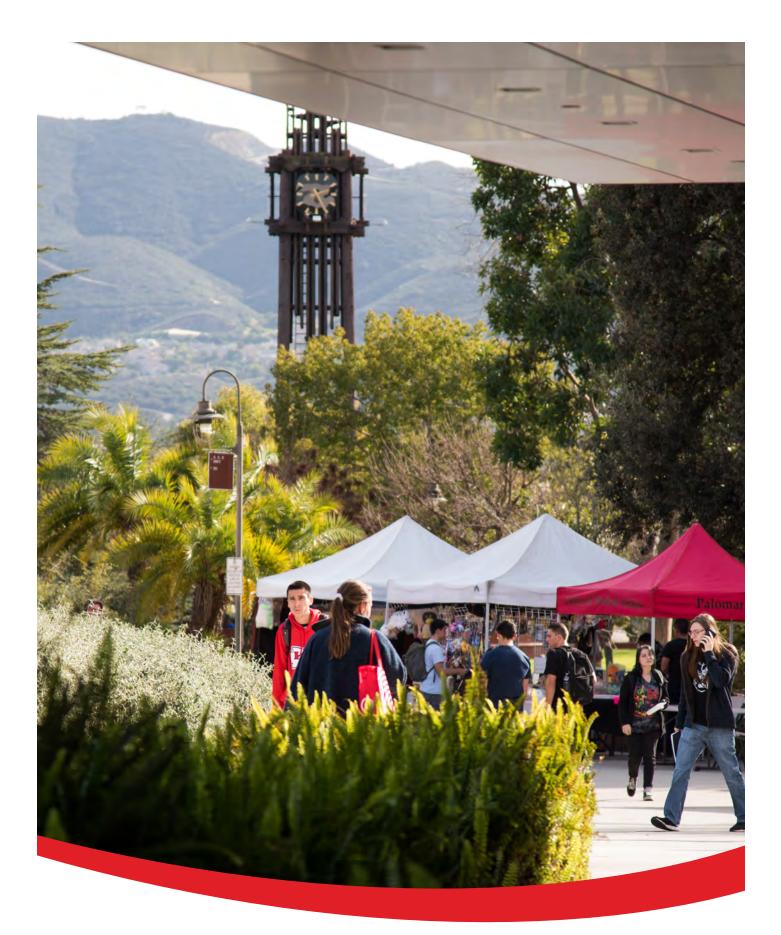
Student Complaints and Grievances Policy

According to AP 5530, the Palomar Community College District authorizes 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 AP 5530, Student Rights and Complaints, may be found on the Student Life & Leadership web page at www2.palomar.edu/pages/studentlife&leadership/home/policies/ and are also available in the Office of Student Life & Leadership, SU-201. Grade disputes are not a part of the Student Grievance Policy. Please see Student Grade Disputes.

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.

ACADEMIC REGULATIONS & STANDARDS <u>5</u>

Section 5
Academic Regulations and Standards

Academic Policies

Academic Renewal

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 petition for up to thirty (30) units of previous substandard (D, F, FW, NP/NC) course work attempted at Palomar College or any other institution to be disregarded when computing the grade point average (GPA). 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.

Procedures
- The student completes a Petition for Academic Renewal with a counselor's assistance. Forms are available from the Counseling Office, Records Office, or the Palomar Website.
- At least 50% of the units attempted in the term(s) under consideration must be substandard, the total GPA of which is less than 2.0; and must no longer reflect the student's current level of performance and capabilities.
- Two years must have passed since attempting the course work to be excluded from GPA calculation.
- The student must have successfully completed 24 semester units since the term(s) to be disregarded, either at Palomar or another regionally accredited college or university.
- The student must have a minimum 2.0 GPA since the time of attempting the course work to be disregarded.
- The petition will be reviewed by Records Office personnel for compliance with policy and procedures. The student will be notified by mail and/or email of the approval or denial of the request.

Academic renewal does not guarantee that other institutions will approve such action. This determination will be made by the respective transfer institution.

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

Annotation of Permanent Record
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, insuring a true and complete academic history. Academic Renewal actions are irreversible.

Attendance

Student Responsibility
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 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.

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 allowed at the discretion of the instructor, department chair, and division dean and requires all three signatures in that order.
- A student must provide an unofficial transcript or documentation that supports the rationale for auditing the course.
- An audit student shall not be permitted to change his/her enrollment in the course to receive credit.
- With the instructor, department chair, and division dean signed permissions, a student may enroll in a course for audit no earlier than the day after the last day to enroll without instructor permission, and no later than the end of the fourth week of class for semester-length classes (or prior to 30% of a short-term class).
- 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.
- The fee to audit a class is $15.00 per unit. Students enrolled in 10 or more units may audit 3 units free (may be 3 one-unit classes). The $15.00 per unit audit fee will automatically be assessed if the student drops below 10 units.

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 courses are excluded from the established unit limit for financial aid eligibility (up to 30 units): English 10; Mathematics 10, 15; Reading 10, 11; and ESL units below 50.

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.

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.

Pass/No Pass (Credit/No-Credit) Grading

Pass/No Pass (P/NP) grading is available in the following options:
- Courses in which all students are evaluated on a pass/no pass grading basis
- Courses in which each student may elect to take the course on a pass/no pass grading basis

The decision to change to pass/no pass 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 student evaluated on the pass/no pass grading basis will receive both course credit and unit credit upon satisfactory completion of the course. Units attempted for which NP is recorded shall be considered in progress probation and dismissal procedures. P/NP grades are omitted in computing a student's grade point average. Students may repeat a course in which a substandard evaluative grade was received on a pass/no pass grading basis (reference repetition to alleviate substandard course work in non-repeatable courses).

A grade of P is granted for performance that is equivalent to the letter grade of 'C' or better. A student who fails to perform satisfactorily will be assigned an NP grade. The student is held responsible for all assignments and examinations required in the course. The standards for evaluation are identical for all students in the course.

A student may reverse his/her enrollment from Pass/No Pass 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.

English 100, 202, and 203 may not be taken on a P/NP basis. Students are advised that four-year institutions may limit the number of pass units acceptable for transfer, and with few exceptions do not allow pass/no pass grading for major prep.

Repetition of Courses

A student is not obligated to repeat a course in which a substandard grade (D, F, FW, NP/NC) has been received unless it is a course required for graduation or transfer, or is a prerequisite to another required course.

A student, when appropriate, will be blocked from enrolling in a repeated course or administratively dropped from a repeated course.

For student financial aid eligibility, all course enrollments will be counted as total units attempted.

Nothing can conflict with Education Code section 76224 pertaining to the finality of grades assigned by instructors, or with Title 5 or District procedures pertaining to the retention and destruction of student records.

Course repetition occurs when a student re-enrolls in a course for which they have previously enrolled (as defined above).

Enrollment and Course Repetition

Enrollment is defined as occurring when a student receives an evaluative (A, B, C, D, F, FW, P/CR, NP/NC) or non-evaluative (I, IP, RD, W, MW) symbol in a course.

"W" symbols are included in the maximum allowable enrollments. A student may not receive more than three W's in a course. No more than three enrollments are allowed in any combination, excluding MW, of evaluative (A, B, C, D, F, FW, P/CR, NP/NC) and non-evaluative (I, IP, RD, W) symbols. An approved petition for a fourth enrollment must result in an evaluative grade.

Palomar College will allow course repetition to occur only under the following circumstances.

Repeatable Courses

Title 5 designates only the following types of courses as repeatable:
1. Courses for which repetition is necessary to meet the major requirements of CSU or UC for completion of a bachelor's degree;
2. Intercollegiate athletics; and
3. Intercollegiate academic or vocational competition.

Eligible courses may be repeated up to three times for a total of four enrollments. This limitation applies even if a student receives a

substandard grade (D, F, FW, NP/NC) or withdrawal (W) during one or more of the enrollments in such a course.

When a course is repeated under this provision, the grade received each time shall be included for purposes of calculating the student's grade point average.

If a student repeats a repeatable course and a substandard grade has been recorded, the previous (no more than two) grade and credit will be disregarded provided that no additional repetitions are permitted beyond the enrollment limit of four.

Repetition to Alleviate Substandard Course Work in Non-Repeatable Courses

Most courses are not repeatable. Course repetition limits apply only to courses taken at Palomar College. Students who have substandard work from other institutions are allowed to attempt the course up to three times at Palomar College following the guidelines listed below.

First Attempt:
- If a student earns a passing grade (A, B, C, or P) or an Incomplete (I) the student may not enroll in the course a second time.
- If a student earns a substandard grade (D, F, FW, or NP) or withdrawal (W) at Palomar College the student may enroll in the course a second time.

Second Attempt:
- If a student earns a passing grade (A, B, C, or P) or an Incomplete (I) on the second attempt, the student may not enroll in the course again. The student must submit a Grade Adjustment Form to prevent the first grade from being calculated in the grade point average. However, all grades will continue to appear on the transcript.
- If a student earns a substandard grade (D, F, FW, or NP) or withdrawal (W) at Palomar College the student may enroll in the course a third time.

Third Attempt:
- If a student earns a passing grade (A, B, C, or P) or an Incomplete (I) on the third attempt, the student may not enroll in the course again. The student must submit a Grade Adjustment Form to prevent the first and second grades from being calculated in the grade point average. However, all grades will continue to appear on the transcript.
- If a student earns a substandard grade (D, F, FW, or NP) or withdrawal (W) on the third attempt at Palomar College the student may not enroll in the course a fourth time at Palomar College. Individual exceptions may be made only with documentation of extenuating circumstances.

Upon each repetition to alleviate substandard course work, the student must submit a Grade Adjustment Form to prevent the first and second substandard grades from being calculated in the grade point average. Upon submission of this form, only the most recent evaluative grade will be computed in the grade point average and annotated on the student's permanent academic record.

If a student repeats a repeatable course and a substandard grade has been recorded, the previous (no more than two) grade and credit will be disregarded provided that no additional repetitions are permitted beyond the enrollment limit of four.

No more than two substandard grades may be alleviated pursuant to this section.

Repetition Due to Significant Lapse of Time

A student may submit a Petition for Course Repetition form to the Evaluations Office to repeat a course in which a satisfactory grade was received and there has been a significant lapse of time of no less than three years since the grade was obtained.

The following circumstances apply to this provision:
1. A recency prerequisite exists for a course or program; or
2. Another institution of higher education to which the student seeks to transfer has established a recency requirement which the student will not be able to satisfy without repeating the course in question.

If a student has exhausted the number of permitted repeats in an active participatory course or an experience course that is related in content, one additional repeat may be approved by petition, with appropriate supporting documentation, due to significant lapse of time.

Upon repetition, the previous grade and credit will be disregarded in computing the grade point average and annotated on the student's permanent academic record.

Repetition Due to Extenuating Circumstances

A student may submit a Petition for Course Repetition form to the Evaluations Office to repeat a course (excluding repeatable courses) based on a finding that the student's previous grade (whether substandard or passing) was, 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. Appropriate supporting documentation must be submitted with the petition.

Upon repetition, the previous grade and credit will be disregarded in computing the grade point average and annotated on the student's permanent academic record.

Repetition of Cooperative Work Experience Education

A student may repeat a Cooperative Work Experience course in a given field any number of times provided the student does not exceed 16 units in any combination of general or occupational work experience, subject to the following limitations:

1. General Work Experience Education: A maximum of 6 units may be earned during one enrollment period (semester or session).
2. Occupational Work Experience Education: A maximum of 8 units may be earned during one enrollment period (semester or session).

When a cooperative work experience course is repeated, the grade received each time shall be included for purposes of calculating the student's grade point average.

Repetition of Disability Resource (DR) or Adaptive Kinesiology Classes for Students with Disabilities

A student may repeat a class for students with disabilities any number of times based on an individualized determination that such repetition is required as a disability-related accommodation for that particular student for one of the following reasons.

1. The student's continuing success in other classes is dependent on additional repetitions of a specific DR or Adaptive Kinesiology class;

2. The student needs additional repetitions of a specific DR or Adaptive Kinesiology class as preparation for enrollment into other classes; or

3. The student has an educational contract that involves a goal other than completion of the DR or Adaptive Kinesiology class in question and repetition of the course will further achievement of that goal.

Repetition to Meet a Legally Mandated Training Requirement

A student may repeat a course determined to be legally mandated by statute or regulation as a condition of paid or volunteer employment. Such courses may be repeated for credit any number of times.

Prior to enrolling, the student must submit a Petition for Course Repetition form for each repeat to the Evaluations Office with appropriate certification or documentation of the mandated training.

When a course is repeated to meet a legally mandated training requirement, the grade received each time shall be included for purposes of calculating the student's grade point average.

Repetition Due to a Significant Change in Industry or Licensure Standards

A student may repeat a course as a result of a significant change in industry or licensure standards such that repetition of the course is necessary for employment or licensure. Such courses may be repeated for credit any number of times.

Prior to enrolling, the student must submit a Petition for Course Repetition form for each repeat to the Evaluations Office with appropriate certification or documentation that there has been a significant change in industry or licensure standards necessitating course repetition.

Enrollment Limitations
Non-Repeatable Courses

Most courses are not repeatable. Course repetition limits apply only to courses taken at Palomar College. Students who have substandard work from other institutions are allowed to attempt the course up to three times at Palomar College following the guidelines listed below.

• If a student earns a passing grade (A, B, C, or P) or an Incomplete (I) the student may not enroll in the course a second time.

• If a student earns a substandard grade (D, F, FW, or NP) or withdrawal (W) at Palomar College the student may enroll in the course a second time.

Repeatable Courses and Courses with Related Content

According to Title 5, Section 58161, courses designated as repeatable and courses related in content may not exceed four enrollments. This limitation applies even if a student receives a substandard grade (D, F, FW, NP/NC) or W during one or more enrollments in such a course.

State guidelines limit the number of times students may take courses with related content and similar primary educational activities. Groups of courses that fall within these categories are listed in Section 8 of the catalog. Students are limited to one enrollment for each satisfactory grade, with no more than four total enrollments per group.

One additional enrollment may be permitted on an appeal basis due to Extenuating Circumstances or due to Significant Lapse of Time. Appropriate supporting documentation must be submitted with the Petition for Course Repetition form.

Student Record Annotation

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.

A course may be repeated up to two times to alleviate a substandard grade.

Course	Grade	Units	Grd Pts	Units/GPA
MATH 50	D	4.0	4.0	Excluded
MATH 50	B	4.0	8.0	Included
MATH 60	F	4.0	0.0	Excluded
MATH 60	D	4.0	4.0	Excluded
MATH 60	FW	4.0	0.0	Included
MATH 60	Not allowed to enroll again			

One additional enrollment may be granted on an appeal basis due to Extenuating Circumstances (excluding repeatable courses).

Course	Grade	Units	Grd Pts	Units/GPA
ENG 100	D	4.0	4.0	Excluded
ENG 100	C	4.0	8.0	Excluded
ENG 100	B	4.0	12.0	Included
ENG 202	D	4.0	4.0	Excluded
ENG 202	C	4.0	8.0	Excluded
ENG 202	FW	4.0	0.0	Included
ENG 202	Not allowed to enroll again			

One additional enrollment may be granted on an appeal basis due to Significant Lapse of Time (must have received satisfactory grade).

Course	Grade	Units	Grd Pts	Units/GPA
ZOO 200	C	4.0	8.0	Excluded
ZOO 200	B	4.0	12.0	Included
MICR 200	D	4.0	4.0	Excluded
MICR 200	C	4.0	8.0	Excluded
MICR 200	D	4.0	4.0	Included
MICR 200	Not allowed to enroll again			

Courses within a related group are limited to one enrollment for each satisfactory grade, with a maximum of four total enrollments within the group.

Drawing course group: ART 102, 103, 104, 213, 197F

Course	Grade	Units	Grd Pts	Units/GPA
ART 102	W	0.0	0.0	Included
ART 102	B	3.0	9.0	Included
ART 103	A	3.0	12.0	Included
ART 104	FW	3.0	0.0	Included
ART 104	Not allowed to enroll again			
ART 213	Not allowed to enroll			
ART 197F	Not allowed to enroll			

Musicianship course group: MUS 110, 111, 215, 216

Course	Grade	Units	Grd Pts	Units/GPA
MUS 110	F	1.0	0.0	Excluded
MUS 110	A	1.0	4.0	Included
MUS 111	A	1.0	4.0	Included
MUS 215	D	1.0	1.0	Included
MUS 215	Not allowed to enroll again			
MUS 216	Not allowed to enroll			

Repetition of Courses – VA Education Benefits

Repetition Due to Significant Lapse of Time (course taken at another institution)

A student who is certifying VA Education benefits at Palomar College may petition to repeat a course in which a satisfactory grade was received at another institution and there has been a significant lapse of time of no less than three years since the grade was obtained.

The following circumstances apply to this provision before the repeated course can be certified for VA purposes:

1. An official transcript from the institution must be on file with the Records Office.
2. The course to be repeated is a prerequisite to a required course listed on the student's educational objective on file in the Veterans Resource Center.
3. A student attempting to repeat a Math or English course must have current assessment scores from Palomar College, placing the student into the applicable level, on file with the Veterans Resource Center.
4. The student has met with an academic counselor who has advised repetition of the course by placing it on a current educational plan. The education plan must then be submitted to the Veterans Resource Center.

Upon repetition, the previous grade and credit will be disregarded in computing the grade point average and annotated on the student's permanent academic record.

If the course to be repeated was originally taken at Palomar College, the district's policy for Repetition Due to Significant Lapse of Time will apply.

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	Less than satisfactory	1
F	Failing	0
FW	*Failing for unofficial withdrawal	0
P	Passing (At least satisfactory - A, B, C grades. Units awarded not counted in GPA)	
NP	No Pass (Less than satisfactory, or failing - D or F grades. Units not counted in GPA.)	

*F (Failing) Awarded to students who complete the course but fail to achieve the course objectives

FW (Failing Withdrawn) Awarded to students who failed to withdraw from the course and who failed to participate in course activities through the end of the course

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 symbol 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, dismissal, and re-enrollment. Students may not re-enroll in a course in which three W symbols have been recorded on their transcript. Withdrawals during the "no notation" period (see below) will not appear on a transcript.

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

Withdrawal between the second 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 16 weeks) Courses:

No notation (W or any other grade) is made on the student record for withdrawals during the first 20% of the course.

Withdrawal between 20% 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 will result in an FW grade. At the end of the class, the instructor will assign an evaluative (A, B, C, D, F, FW) or Incomplete (I) grade. 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

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.
- Documentation 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

All changes or modifications to a student's record must be requested no later than three years from the semester in question.

Grade Changes

The instructor of the course shall determine the grade to be awarded to each student. The determination of the student's grade by the instructor shall be final in the absence of mistake, fraud, bad faith, or incompetence per Title 5, Section 55025. "Mistake" may include, but is not limited to, clerical errors and errors made by an instructor in calculating a student's grade. "Fraud" may include, but is not limited to, inaccurate recording or change of a grade by any person who gains access to student records without authorization.

Removal or correction of a grade shall only be done pursuant to Education Code Section 76232 or by an alternative method which will ensure that students receive a reasonable and objective review of the requested grade change. Provisions shall be made to allow another faculty member to substitute for the instructor if the student has filed a discrimination complaint, if the instructor is not available, or where the District determines that it is possible that there may have been gross misconduct by the original instructor. The Palomar College Student Grade Dispute Policy and Procedure is available on the Faculty Senate's web page and the Instructional Services web page, under Student Forms.

No grade placed in a student's academic 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 three years from the semester in question. Registration records are maintained only for a three-year period.

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 three weeks after the end of the class. Grades may be accessed online through MyPalomar. 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. Pass/No Pass 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 LIfe & Leadership Office, SU-201.

Students interested in becoming a member of Phi Theta Kappa should contact the Student LIfe & Leadership 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.

Standards for Probation
Academic and Progress Probation Levels 1 and 2 are calculated for the fall and spring semesters on the basis of the student's enrollment. Summer grades are included in overall calculations for the fall and spring semesters.

Probation 1 and 2 are posted on the student's permanent record. To remain in good standing at Palomar College, students must maintain a minimum cumulative grade point average (GPA) of 2.0 (C), and must complete more than 50% of the units in which they have enrolled.

Effective Fall 2014, loss of priority registration will occur for students placed on academic or progress probation level 2 for a second consecutive term, and will continue until the student is no longer on a probation status.

Effective Fall 2016, a student who has been on Academic or Progress probation for two consecutive terms will lose their eligibility for the Board of Governor's Fee Waiver, and will not regain their eligibility until the student is no longer on a probation status.

Academic Probation Level 1
Students will be placed on academic probation 1 when they have:
• Attempted at least 12 graded units; and their
• Cumulative (overall) GPA falls below 2.0

Academic Probation Level 1 Continued
Students will be continued on academic probation 1 when:
• Cumulative (overall) GPA is below 2.0, and
• Semester (term) GPA is at least 2.0

Progress Probation Level 1
Students will be placed on progress probation 1 when they have:
• Attempted at least 12 units; and their
• Cumulative (overall) units with grades of W, I, NP, or NC reaches or exceeds 50% of all units attempted

Progress Probation Level 1 Continued
Students will be continued on progress probation 1 when:
• Cumulative (overall) attempted units with W, I, NP, or NC grades continue to be 50% or more of all attempted units; and
• Semester (term) attempted units with W, I, NP, or NC grades are below 50%

Academic Probation Level 2
Students will move to academic probation 2 if:
• Cumulative (overall) GPA is below 2.0, and
• Semester (term) GPA is below 2.0

Academic Probation Level 2 Continued
Students will be continued on academic probation 2 when:
• Cumulative (overall) GPA is below 2.0, and
• Semester (term) GPA is at least 2.0

Progress Probation Level 2
Students will move to progress probation 2 if:
• Cumulative (overall) attempted units with W, I, NP, or NC grades continue to be 50% or more of all attempted units; and
• Semester (term) attempted units with W, I, NP, or NC grades are also at 50% or more of all attempted units

Progress Probation Level 2 Continued
Students will be continued on progress probation 2 when:
• Cumulative (overall) attempted units with W, I, NP, or NC grades continue to be 50% or more of all attempted units; and
• Semester (term) attempted units with W, I, NP, or NC grades are below 50%

Students on Probation 2 are required to meet with a counselor to complete an educational plan, and are expected to participate in prescribed strategies and/or support services. An enrollment hold will be placed on the student's records blocking registration until they have met with a counselor.

Removal from Probation Level 2
A student on Academic or Progress Probation 2 shall be removed from probation when the student's overall grade point average at Palomar College has improved to 2.0 or higher and their number of completed units reaches more than 50% of all attempted units.

Standards for Dismissal
For the purpose of dismissal, semesters shall be considered consecutive on the basis of the student's enrollment, so long as a break in the student's enrollment does not exceed one full primary term.

A student on dismissal status is ineligible to participate in any Palomar College classes or student activities until the requirements for dismissal have been fulfilled. Dismissal is posted on the student's permanent record.

Academic Dismissal
A student who is on academic probation 2 shall be subject to dismissal if the student earned a cumulative and semester GPA below 2.0 in all units attempted in each of three consecutive semesters.

Students who begin the spring semester on academic probation 2 will be dismissed if they fail to achieve a minimum semester GPA of 2.0 at the end of the spring term.

Progress Dismissal
A student who is on progress probation 2 shall be subject to dismissal if the student's cumulative and semester percentage of all enrolled units with W, I, or NP/NC grades reaches or exceeds 50% percent in each of three consecutive semesters.

Students who begin the spring semester on progress probation 2 will be dismissed if they fail to complete more than 50% or their spring semester course work with grades other than W, I, NP, or NC at the end of the spring term.

Notification of Probation and Dismissal
The Admissions and Records Office shall make every reasonable effort to notify a student of their academic standing within 30 days of the grade submission due date. A student removed from probation level 2 or reinstated after dismissal shall be notified as soon as possible.

Reinstatement after Dismissal
Students who have been dismissed for academic and/or progress reasons are eligible to return after one semester by petition to the Academic Review Committee. Students reinstated by petition return to the College on Probation Level 2, and must maintain a term GPA of 2.0, and/or successfully complete more than 50% of their term course work, to avoid returning to dismissal status. For

further information, please stop by the Evaluations Office in the Student Services Center. Students who are dismissed lose their continuing student status and must re-apply to the College.

Students who believe their dismissal should be put aside after being notified must immediately petition the Academic Review Committee. Students must meet with a counselor to initiate the petition process. Petitions may be approved due to extenuating circumstances such as verified cases of accident, illness, or other circumstance beyond the control of the student.

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, Veterans, and Scholarship Services 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 Level 2 by the College.

Potential financial aid students who are placed on Academic or Progress Probation Level 2 by the College will be automatically ineligible for financial aid.

Students are advised that they may submit a Satisfactory Academic Progress (SAP) appeal to the Financial Aid, Veterans, and Scholarship Services Office. More detailed information on the Financial Aid Satisfactory Academic Progress Policy is also available on our web page, www2.palomar.edu/pages/fa/.

Title 38 Beneficiaries (VA Education Benefits) Disqualification/Dismissal

For a veteran/dependent student using VA Education Benefits (Title 38) who falls into academic (term and cumulative GPA falls below 2.0, upon attempting 12 cumulative units or more) probation for any semester or session (including summer), the Veterans' Services Office is required to notify the Department of Veteran Affairs (DVA). If the cause for probation has not been removed at the end of three consecutive semesters or sessions (including summer session), the student would be ineligible for benefits for one semester at Palomar College and must follow the reinstatement policy.

Effective Fall 2014, loss of priority registration will occur for students placed on academic or progress probation level 2 for a second consecutive term, and will continue until the student is no longer on a probation status.

Title 38 Beneficiaries (VA Education Benefits) Reinstatement after Dismissal

Reference: U.S. Department of Veteran Affairs, School Certifying Official Handbook for VA Education Benefits; Section: Unsatisfactory Progress, Conduct, and Attendance - Recertification of VA Claimant

Veteran/dependent students who have been academically dismissed from Palomar College and wish to pursue reinstatement for VA Education Benefits must fulfill the following requirements:

1. The student must take a full term off from using VA Education Benefits at Palomar College.
2. The student must meet with a Veterans Counselor to get an updated education plan.

3. During or after the term taken off, the student must complete a petition to be reinstated for Education Benefits at Palomar College.
4. The student must submit the petition for reinstatement and updated education plan to the Veterans' Resource Center. The Director of Veterans Services will review the petition, and approval or denial will be determined by the Director's assessment of the student's likelihood of attaining success in his/her educational objective.
5. If the petition is approved, the student will be allowed to certify VA Education Benefits after enrollment. If denied, the student has an opportunity to make an appointment with the Director for review of the decision.
6. If the student's term GPA falls below 2.0 in any future term after reinstatement, the student will be dismissed indefinitely from using VA Education Benefits at Palomar College.

Please check with the Veterans Resource Center for details.

Official Transcript and Verification of Enrollment

The transcript is a duly certified record of all work completed or attempted by the student at Palomar College. Official transcripts may be requested through eServices, in person, or by mail. The first two transcripts ever issued to/for the student are furnished free of charge upon request.

Verifications of enrollment may be requested through the Records Office.

Rush requests are processed within two (2) business days upon receipt of written request for both pick-up and mail service. Refer to Section 2, Fees and Expenses, Transcript Fees, or see the Transcript web page, http://www2.palomar.edu/pages/enrollmentservices/trasncripts, for more information.

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, nor released to the student.

Transcripts are sent only upon the written request of the student. Seven to ten (7-10) 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

Palomar College is not the custodian of transcripts/test scores from other institutions. When a student has never applied and we have no record of attendance, transcripts/test scores from other institutions will be purged and the student must re-submit upon application for admission.

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 to have transfer credit course work applied to Palomar degree, certificate, or transfer evaluations. 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, elective, 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.

Career Technical Education (CTE) Transitions Program

The CTE Transitions program (formerly known as the Tech Prep Program) is a technical and academic preparation program that enables high school students to prepare for a career and college at the same time. Students can even earn college credits while still in high school!

CTE Transitions is a bridge that connects learning to careers. It is designed to help students gain academic knowledge and technical skills, whereby they can earn college credit for their secondary (high school) course work through the completion of articulated courses. Programs are intended to lead to an associate degree or a certificate in a specific career field, and ultimately, to high wage, high skill employment or advanced postsecondary (college) training.

Through the Credit by Examination process, high school students may receive credit at the college level for some articulated courses. Palomar College awards college credit to high school students who earn an A or B in career-related, articulated high school course work and who pass an exam approved and/or conducted by Palomar College faculty. 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.

For more information about the CTE Transitions high school course articulation program, contact the Palomar College CTE Transitions office in AA-134 or at 760-744-1150, ext. 2692 for any additional information.

Defense Activity for Non-Traditional Education Support (DANTES) Examination Program

Palomar College may award credit for successful completion of certain DSST (DANTES Subject Standardized Test) exams to students who attain satisfactory scores. Access the DANTES Program Guide on the Articulation website, http://www2.palomar.edu/pages/articulation/ap-ib-clep-and-dantes/, to identify how DANTES credit can be applied tothe Associate degree. See a counselor for specific information regarding DSST placement and credit awarded.

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, visit the DANTES website. Information may be found at http://www.dantes.doded.mil under Examination Programs.

Foreign Course Work

Students who have satisfactorily completed course work from a foreign nation's appropriately accredited university may be able to apply those course credits toward an Associate degree at Palomar College. Course work must first be evaluated by an approved credentials evaluation agency and then reviewed by Palomar's Evaluations Office. Some course work may also require approval by Department Chairs.

To have foreign course work credits evaluated, students should contact one of the approved credentials evaluation agencies. A list is available in the Evaluations Office. Request a detailed equivalency report that indicates - for each course - whether it is an upper- or lower-division course, it's U.S. semester equivalency, and the grade the student earned. The Evaluations Office will determine how course work will be applied to requirements. Palomar College will not determine course transferability to other colleges and universities.

Please note foreign course work will NOT satisfy general education requirements for English composition and oral communication courses.

Religious Course Work

Palomar College will not accept any course, even from a regionally accredited institution, that promotes a specific religious doctrine. Courses with a broad philosophical perspective will be accepted.

Examples of courses which may be appropriate for general education include The Bible, The New Testament, The Koran, and The Torah, as long as the treatment of these topics is academic and stresses these books as literary works in an historic or philosophic way.

We will not accept courses that are taught from a specific doctrinal perspective or which attempt to proselytize. Examples of courses which are not appropriate for general education include Preparing for a Mission, The Baptist Ministry, and Living as a Christian. Courses which by title may not appear as faith-based may still be unacceptable if the description includes dogma.

U.S. Air Force ROTC Program

The Air Force Reserve Officer Training Corps (ROTC) is a three or four year program designed to equip students with leadership skills and commission officers for tomorrow's Air Force. Required course work includes lectures, a leadership laboratory practical component, panel discussions, dialogues, problem solving, and physical training. All course work is completed on-site at or near San Diego State University (SDSU), with the exception of a four-week summer Field Training encampment conducted on a military base between the second and third year.

Palomar College does not have an ROTC program; however, under the provisions of a special agreement, students may participate in the ROTC program at SDSU. Students may enroll and attend ROTC classes at SDSU by contacting the SDSU Aerospace Studies Department at (619) 594-5545. Scholarships may be available for qualified cadets. The credits in these classes may be transferred as electives to meet degree requirements. Upon successful completion of the program and all requirements of a bachelor's degree, cadets are commissioned as Second Lieutenants and serve a minimum of four years of active duty in the Air Force.

Credit for Prior Learning

Credit for prior learning may be earned for eligible courses approved by the District for students who satisfactorily pass an authorized assessment. Authorized assessments may include the evaluation of approved external standardized examinations, military service/training, the evaluation of industry recognized credentials, student-created portfolios, and credit by examination. Details may be found at www2.palomar.edu/pages/cpl/ and administrative procedure 4235. Students may demonstrate proficiency in a course eligible for Credit for Prior Learning and receive college credit through the approved alternative methods for awarding credit listed below:

- Achievement of a satisfactory score on an Advanced Placement (AP) examination
- Achievement of a satisfactory score on a high level International Baccalaureate (IB) examination
- Achievement of a satisfactory score on the College Level Examination Program (CLEP)
- Evaluation of military service Joint Service Transcripts (JST)
- Achievement of an examination administered by other agencies approved by the District
- Evaluation of industry recognized credential documentation
- Evaluation of student-created portfolios
- Satisfactory completion of an institutional examination, known as Credit by Examination, administered by the college in lieu of completion of an active course listed in the current college catalog

Determination of Eligibility for Credit for Prior Learning
- The student must be in good standing in the District
- The student must have previously earned credit or noncredit from the District or be currently registered in the District
- Current students must have an education plan on file
- The course is listed in the current Palomar College Catalog
- The student is not currently enrolled in the course to be challenged
- Credit by Examination: The student is registered in the District and not currently enrolled in nor received credit for a more advanced course in the same subject (may be waived by department)

Credits acquired by examination are not applicable to meeting of such unit load requirements as Selective Service deferment, Veterans, or Social Security benefits
Credits acquired by examination shall not be counted in determining the 12 semester hours of credit in residence required for an Associate degree.]

Advanced Placement (AP) Examination Program

The California Community College System, the CSU System, and the UC System all award credit for Advanced Placement (AP) Exams. Palomar College grants credit toward its Associate degrees and CSU GE and IGETC certification patterns to high school students who attain scores of 3, 4, or 5 on the Advanced Placement Examinations of the College Board.

Students may earn a minimum of 3 semester units of credit for each AP exam satisfactorily passed. Access the Advanced Placement Program Guide on the Articulation website, www2.palomar.edu/pages/articulation/ap-ib-clep-and-dantes/, to identify how AP exam credit can be applied. See a counselor for specific information

regarding AP exam placement and credit awarded. 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.

International Baccalaureate (IB) Examination Program

Palomar College may award International Baccalaureate (IB) Examination credit toward the Associate degree, or for CSU GE or IGETC transfer certification, to high school students who attain an appropriate score on Higher Level exams. Access the IB Program Guide on the Articulation website, www2.palomar.edu/pages/articulation/ap-ib-clep-and-dantes/, to identify how IB exam credit can be applied.

See a counselor for specific information regarding IB exam placement and credit awarded. Students intending to transfer to a four-year institution should consult a counselor or the individual university regarding its IB credit policy for major course work. To receive credit, students must submit an official IB transcript to the Records Office.

College Level Examination Program (CLEP)

Palomar College grants credit for successful completion of certain CLEP examinations to students who attain satisfactory scores. Access the CLEP Program Guide on the Articulation website, www2.palomar.edu/pages/articulation/ap-ib-clep-and-dantes/, to identify how CLEP credit can be applied.

Students may earn a minimum of 3 semester units of credit for each exam satisfactorily passed. See a counselor for specific information regarding CLEP placement and credit awarded. 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. The University of California does not award units for CLEP. CLEP credits do not apply toward IGETC requirements. For information on obtaining a transcript, contact the College Board. Information is available at www.collegeboard.com.

Military Service/Joint Service Transcripts

Palomar College may award credit for schools and training completed while in the military. Typically, credit awarded is applied only toward the Associate degree, usually as elective units. However, completion of Basic/Recruit Training will meet the Health and Fitness requirement for the Associate degree, and will meet Area E requirements for both Associate Degree GE and CSU GE.

Students may earn 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: Joint Services Transcript (JST); 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; Coast Guard Institute (CGI) transcript; official transcripts from DANTES/USAFI; Defense Language Institute Foreign language Transcripts (DLIFLC); Defense Manpower Data Center (DMDC) DLPT Examinee Results; DA Form 330 Language Proficiency Questionnaire; or verified copies of DD214 or DD295 military records.

Industry Recognized Credentials

Students interested in Credit for Prior Learning using industry recognized credential(s) shall receive credit as recommended by the appropriate department chair or faculty designee:

- The student shall complete the Credit for Prior Learning assessment petition available in the Counseling or Records office
- Enrollment services shall grant credit for industry recognized credential(s) that have already been evaluated and approved by the appropriate department chair or faculty designee
- If an industry recognized credential(s) has not yet been evaluated and approved by the appropriate faculty:
- The student meets with the department chair or faculty designee to receive further instructions for industry recognized credential(s) assessment
- The student submits all industry recognized credential documents to the department chair or faculty designee for assessment of prior learning
- If the department chair or faculty designee determine the industry certification adequately measures mastery of the course content as set forth in the Course Outline of Record, the appropriate faculty shall sign the petition with the recorded grade, attach the industry recognized credential(s), and forward the completed petition and supporting documents to the Records Office to be kept on file and recorded on the student transcript

Student-Created Portfolio Assessment

Students interested in Credit for Prior Learning using a student-created portfolio shall receive credit as recommended by the appropriate department chair or faculty designee under the following circumstances:

- A department approved portfolio assessment rubric for the course is on file
- The student shall complete the Credit for Prior Learning assessment petition available in the Counseling or Records Office
- The student meets with the department chair or faculty designee to receive further instructions for student-created portfolio assessment
- The student submits all portfolio documents to the department chair or faculty designee for assessment of prior learning

If the department chair or faculty designee determine the student-created portfolio adequately measures mastery of the course content as set forth in the Course Outline of Record, the appropriate faculty shall sign the petition with the appropriate grade and forward it to the Records Office to be kept on file and recorded on the student transcript

Credit by Examination from Within the District

The Department chair or faculty designee shall 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 and/or experience.

Students wishing to take a course through Credit by Examination are encouraged to informally discuss the matter with the department chair or faculty designee and instructor prior to initiating the formal process. All steps must be completed in the order listed or the Petition for Credit by Examination shall not be processed. The Petition for Credit by Examination must be completed prior to the end of the current semester or session.

Credit by Examination is not available to students who have previously received a substandard grade (D, F, FW) in the course they wish to challenge.

International Students (F-1 Visa) petitioning for Credit by Examination must be full-time, enrolled in 12 or more units (excluding the credit by exam course).

GRADUATION INFORMATION

Section 6
Graduation Information

Associate Degree Requirements
Certificate Requirements

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 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 Degree, the Certificate of Achievement, the Certificate of Proficiency, and the Noncredit Certificate of Completion.

General Education/Institutional Student Learning Outcomes

The General Education Program at Palomar College promotes competence in various fields of specific knowledge, provides an academic foundation for lifelong learning, and enriches students' lives. As a result of the general education experience, students will demonstrate:

Knowledge of Human Cultures and the Physical and Natural World through
• Study in the sciences and mathematics, social sciences, humanities, histories, languages, and the arts
• Focused by engagement with big questions, both contemporary and enduring

Intellectual and Practical Skills, including
• Inquiry and analysis
• Critical and creative thinking
• Written and oral communication
• Artistic perception
• Quantitative literacy
• Information literacy
• Digital literacy
• Teamwork and problem solving
  Practiced extensively, across the curriculum, in the context of progressively more challenging problems, projects, and standards for performance

Personal and Social Responsibility, including
• Civic knowledge and engagement—local and global
• Intercultural knowledge and competence
• Ethical reasoning and action
• Foundations and skills for lifelong learning
  Anchored through active involvement with diverse communities and real-world challenges

Integrative Learning, including
• Synthesis and advanced accomplishment across general and specialized studies
  Demonstrated through the application of knowledge, skills, and responsibilities to new settings and complex problems

General Education/Institutional Student Learning Outcomes and Course Student Learning Outcomes are also available at www2.palomar.edu/pages/slo/

Associate Degrees

Palomar College currently offers an Associate Degree in Arts (AA), an Associate Degree in Science (AS), an Associate Degree in Arts for Transfer (AA-T), and an Associate Degree in Science for Transfer (AS-T). A detailed listing of degree options are in Section 8 of this catalog titled "Programs and Credit Courses." Official transcripts from all previously attended, regionally-accredited institutions must be on file with the Records Office.

Associate Degree Requirements

I. Minimum Units
The Associate 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 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) degree applicable semester units in residence at Palomar College.

IV. Major
There are three Associate degree options, University Studies, General Studies, and Specified Palomar Major. The District and General Education Requirements listed under V and VI apply to all options.

Option 1: University Studies
An Associate degree that provides completion of a general education transfer pattern including many, if not all, lower-division major preparation requirements for students transferring to either the California State University or University of California System. Based on their transfer major, students may select only one available emphasis.

Requirements
1. Associate Degree District Requirements.
2. Associate Degree General Education Requirements.
3. A University Studies Emphasis selected from the ten options listed under University Studies in Section 7. All courses within the major must be completed with a 'C' or better.
4. Electives, if needed, to obtain a minimum of 60 degree-applicable units.

Option 2: General Studies

Study in general education providing maximum flexibility in program design leading to an Associate 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. Students may select only one available emphasis.

Requirements

1. Associate Degree District Requirements.
2. Associate Degree General Education Requirements.
3. A General Studies Emphasis selected from the three options listed under General Studies in Section 7. All courses within the major must be completed with a 'C' or better.
4. Electives, if needed, to obtain a minimum of 60 degree applicable units.

Option 3: Specified Palomar Major

Provides study in general education and an Associate 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. Associate Degree District Requirements.
2. Associate Degree General Education Requirements.
3. Specific Major Requirements as outlined in the program offerings. All courses within the major must be completed with a 'C' or better.
4. Electives, if needed, to obtain a minimum of 60 degree applicable units.

Contact the Counseling Center at 760-891-7511, to request an appointment with a counselor for further information about any of the three Associate 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**
   Demonstrated by course completion or examination.

   Course Completion:
   English 100 with a grade of 'C' or better.

   Examination:
   AP: Minimum score of 3 on the English: Language & Composition, or the English: Literature & Composition exam

2. **Competence in Mathematics**
   Demonstrated by course completion or examination.

   Course Completion:
   Mathematics 56 or 60 or higher-level math course with a grade of 'C' or better.

   National Exams
   ACT: Minimum score of 23 on the mathematics section
   AP: Minimum score of 3 on the Calculus AB, Calculus BC, or the Statistics exam

CLEP: Minimum score of 50 on an approved CLEP mathematics examination. See a counselor for a list of approved examinations.
SAT: Minimum score of 550 on the mathematics section

3. **Competence in American History and Institutions/California Government**
   Demonstrated by course completion or examination.

   Complete one Palomar course (or an equivalent) or AP/CLEP/SAT Subject exam from each of the three US components, except where two courses are listed as fulfilling the area together. A grade of "C" or better is required for course work. Courses listed in more than one area can meet multiple components (e.g. HIST 102 meets US-1 and US-3). Minimum exam scores are listed with each approved exam. See ASSIST.ORG for up to date approvals.

   US-1: The historical development of American institutions and ideals (100 years of U.S. history).
   Africana Studies 101
   Africana Studies 102
   American Indian Studies 101
   American Indian Studies 102
   Chicano Studies 101
   Chicano Studies 102
   History 101
   History 102
   History 140
   History 141
   Political Science 101 (F16)
   Religious Studies 102 [F08]
   AP Exam (Score of 3): U.S. History
   CLEP (Score of 50): History of the U.S. I
   CLEP (Score of 50): History of the U.S. II
   SAT Subject Test (Score of 550): U.S. History

   US-2: The Constitution of the United States and the operation of representative democratic government.
   Africana Studies 101 (F16)
   American Indian Studies 101 (F16)
   Chicano Studies 101
   History 101 (F16)
   History 140 (F16)
   Legal Studies 240 (F16)
   Political Science 101, 102, 240 (F16)
   Religious Studies 103 (F19)
   AP Exam (Score of 3): U.S. Government & Politics

   US-3: The process of California state and local government.
   Africana Studies 102
   American Indian Studies 102
   Chicano Studies 102
   History 102
   History 141
   Political Science 102
   Political Science 120 (F09)
   Religious Studies 103 (F19)

Students who have completed course work outside California should consult with a counselor to ensure completion of the three required components.

4. **Competence in Health and Fitness**
   Demonstrated by course completion, examination, or U.S. military service.

   Option I

   Course Completion (Select A or B)
   Courses need not be taken concurrently, but must be completed with a grade of 'C' or better:
   A. Health 100 **and**
      One approved fitness activity course:
      ACS 100-level Intercollegiate Sport **or**
      HE 100L **or**
      KINE 105, 128A, 128B, 128C, 128D, 135A, 135B, 135C, 140A, 140B, 140C, 150A, 150B, 150C **or**
      Fire 151 **or**
      Completion of Police Academy
   B. Equivalent lecture **and** fitness activity course work.
      Approved lecture courses (minimum of 9 units):
      HE/FCS/NUTR 165, **or**
      BIOL/FCS/NUTR 185, **and**
      PSYC 100 **and**
      BIOL 100 or 101 or 102 or 105 or 106, or 145 or 210 or 211
      Approved fitness activity courses (minimum of 1 unit):
      ACS 100-level Intercollegiate Sport **or**
      HE 100L **or**
      KINE 105, 128A, 128B, 128C, 128D, 135A, 135B, 135C, 140A, 140B, 140C, 150A, 150B, 150C **or**
      Fire 151 **or**
      Completion of Police Academy

   Option II

   Competence Examination (acceptable tests and scores listed below):

   Written Exam:
   Achieve a minimum score of 70% (currently 179 out of 225) on the Palomar College written test covering principles of nutrition, first aid, cardio-vascular fitness, flexibility, anatomy and physiology, substance abuse, sexually transmitted diseases, and other health-related topics as listed in the Course Outline of Record. This test may be taken only one time in a 3-year period. Contact the Health, Kinesiology, and Recreation Management Department for the testing schedule.

   Fitness Exam:
   NOTE: Applies only to students who have successfully passed the written exam.
   Participate in a 12-minute run, 20-minute swim, or 30-minute stationary bike test. Students with physical limitations may be required to obtain a physician's approval to take the test.

   Jogging (12 minutes)

Age	Men	Women
Under 30	6 1/2laps	5 1/2 laps
30 – 39	5 3/4laps	4 3/4 laps
40 – 49	4 1/4 laps	3 laps
50 and over	3 3/4 laps	2 3/4 laps

   Swimming (20 minutes)

Age	Men and Women
Under 40	1/2 mile
40 and over	1/2 mile (no time limit)

   Stationary Bike Test (30 minutes)
   Warm-up 5 minutes at 100 watts*, test 20 minutes at required watt output, cool down 5 minutes at 100 watts.

Age	Men	Women
Under 40	175 watts	150 watts
40 and over	150 watts	125 watts

   *Watt = energy output by cadence of pedaling (faster pedaling = increased watts)

   Option III

   Military Service:
   United States military personnel and veterans may fulfill this requirement and be awarded up to 4 units of credit with proof of completion of Basic/Recruit Training and 181 days of continuous active duty. Submit copy of military transcripts to the Records Office: Joint Services Transcript (JST), CCAF, DD214, or DD295.

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.

   Course equivalencies from other institutions may be accepted if the course meets the spirit of the Palomar Multicultural Course Requirement and accurately portrays the cultural and racial diversity of our society. Such courses must focus on a study of multiple cultures and include an emphasis on;

   • One or more of the following four American subcultures: African-American, Latino/Latina, Asian or Pacific Islander, and Native American, and at least one additional culture from inside or outside of the United States if only one American subculture was included.

   • One or more of the following: socio-economic class, age, sexual orientation, different abilities/ableism

   • Gender

   Students must be sure that the course is on the approved list during the academic year in which it is taken. The courses listed below meet the requirement effective fall 1997, or with the semester noted in brackets [Fxx]. Courses taken prior to fall 1997 may not be used to meet this requirement. These courses may or may not satisfy another institution's multicultural requirement.

Administration of Justice 103
Africana Studies 100 [F16], 101 [F16], 102 [F16], 120 [F98]
American Indian Studies 100, 101, 104 [F09], 105 [F99],
    110 [F98], 115, 120, 121,125, 140, 145, 150, 165 [F99]
American Sign Language 110[F17]
American Studies 100, 104 [F11], 105 [F07], 121, 200
Anthropology 105, 107 [F16], 135 [F17] 137 [F08], 140
Architecture 121
Chicano Studies 101 [F16], 102 [F16], 105 [F98], 140
Child Development 172 [F08]
Cinema 122 [F08]
Communications 105 [F98]
Counseling 110 [F01], 120 [F01], 148 [F17]
Dance 101 [F98], 102 [F06], 105 [F99]
Economics 115
English 280 [F02]
Family and Consumer Sciences 150 [F98-X15]
Fashion 132 [F98]
Geography 105 [F12]
Graphic Communications 110 [F11], 115 [F12]
History 121 [F99], 130, 140 [F03], 141 [F03], 150 [F06],
    151 [F06]
International Business 110 [F05]
Multicultural Studies 100 [F98], 115 [F12], 125 [F12],165
[F98], 200
Library Technology 100 [F15]
Music 102 [F10], 171 [F98]
Nursing 103 plus Nursing 217 [F01]
Nursing 110 plus Nursing 217 [F01]
Nutrition 120
Religious Studies 101 [F18], 102 [F08], 103 [F08],110
Sociology 100 [F20], 115 [F04], 130 [F08], 135 [F11], 165, 175,
200
Speech 131
Theatre Arts 100 [F18]

PALOMAR COLLEGE
Associate Degree General Education Requirements
Fall 2020 - Summer 2021

The following list will assist you in choosing courses to fulfill general education requirements for the Associate in Arts or Associate in Science Degree.
- The course must be on the list at the time it was completed
- No course may be used in more than one General Education Area
- Consult a counselor for specific information regarding major prep and additional GE requirements

Major: Complete a program as outlined in the Palomar College catalog. Major course work must be completed with a "C" or better.
Grade Point Average: A minimum cumulative GPA of 2.0 ("C" average) or higher is required. Some programs may require a higher GPA.
Residency: A minimum of 12 units in residence as an officially enrolled student at Palomar College is required.
Total Units: A minimum of 60 degree applicable semester units are required. Courses numbered 1-49 are non-degree applicable and do not count toward the degree.

_____

DISTRICT REQUIREMENTS

C = Complete   **IP** = In Progress   **N** = Need

Competence in American History and Institutions/California Government - A "C" grade or higher is required.
Choose a pair:
AIS 101*+102*; AS 101*+102*; CS 101*+102*; HIST 101+102; HIST 140*+141*; POSC 101+102; RS 102+(F08)+RS 103+(F19)

-OR-

Choose two courses to complete US Areas 1, 2, and 3.
- Courses may be used in more than one area
- Courses may be used to satisfy Area D

*Multicultural: The following courses fulfill the multicultural requirement - AIS 101; AS 101, 102; CS 101, 102; HIST 140, 141; RS 102.

US – 1		US - 2		US - 3	
AIS 101, 102	**POSC** 101+(F16)	**AIS** 101+(F16)	**LS** 240+(F16)	**AIS** 102	**HIST** 102, 141
AS 101, 102	**RS** 102+(F08)	**AS** 101+(F16)	**POSC** 101, 102,	**AS** 102	**POSC** 102, 120+(F09)
CS 101, 102		**CS** 101	240+(F16)	**CS** 102	**RS** 103+(F19)
HIST 101, 102, 140, 141		**HIST** 101+(F16), 140+(F16)	**RS** 103+(F19)		

Circle each US Area completed or in progress.	US 1, 2, 3	Course: _____	C IP N
Circle each US Area completed or in progress.	US 1, 2, 3	Course: _____	C IP N

Competence in Health and Fitness - A "C" grade or higher is required.

Complete **HE 100** and one fitness activity course: **HE** 100L; **KINE** 105, 128ABCD, 135ABC, 140ABC, 150ABC; or **ACS** 100 level intercollegiate sport; or **FIRE** 151; or Completion of **Police Academy**. *See supplemental guide for exceptions, including military service.*

Course: _____	C IP N
Course: _____	C IP N

Competence in Mathematics - A "C" grade or higher is required.

Complete **MATH** 56, 60, or 63; a higher-level **MATH** course. *See supplemental guide for exceptions.*

Course: _____	C IP N

Multicultural Requirement – Complete 3 semester units.
The course must be on the approved list at the time of completion. Approved courses with effective dates may be found in the catalog or on the Supplemental Associate Degree Advising Guide. GE courses meeting this requirement are marked with an *asterisk* * followed by their approval date.
Non-GE courses meeting this requirement are:

AJ 103*; **CHDV** 172*; **CS** 140*; **IBUS** 110*; **LT** 100*; **NURS** 103*/217*; 110*/217*; **SOC** 170*

Course: _____	C IP N

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General Education Requirements

Minimum 18 semester units required. No course may be used to satisfy more than one General Education Requirement

C = Complete   **IP** = In Progress   **N** = Need

Area A: Language and Rationality - Minimum of 3 semester units from each group:

A1. English Composition – "C" grade or higher is required.
ENG 100 or **ESL** 110

Course: _____   C   IP   N

A2. Communication and Analytical Thinking

BUS 110, 204+(F18)
ENG 202, 203
GEOG 150

MATH 56, 60, 63, 100, 101, 105, 106, 110, 115, 120, 126, 127, 130, 135, 140, 141, 200, 205, 206, 245

PHIL 113, 116, 200
PSYC 205
READ 120+(F04)

SOC 205
SPCH 100, 105, 170

Course: _____   C   IP   N

Area B: Natural Sciences – Minimum of 3 semester units (underlined courses include a lab):

ANTH 100, <u>101</u>
ASTR 100, 120
BIOL <u>100</u>, 101, <u>102</u>, <u>105</u>, 106, 110, 114, 118, 120, <u>125</u>, 126, <u>130</u>, 131, 135+(F09), <u>140</u>, 141, 145, 185, <u>200</u>, <u>201</u>, <u>210</u>, <u>211</u>+(F93), <u>212</u>

CHEM <u>100</u>, <u>104</u>, <u>105</u>, 110, 115, 205+(F07), <u>220</u>, <u>221</u>
ENGR 210
ES 100, 115
GEOG 100, 110, 115+(F95), 125

GEOL 100, 110, 120, 150
NUTR 185
OCN 100
PHSC 100, 101

PHYS <u>101</u>, 102, <u>120</u>, <u>121</u>, <u>200</u>, <u>201</u>, <u>230</u>, <u>231</u>, <u>232</u>
PSYC <u>210</u>

Course: _____   C   IP   N

Area C: Humanities – Minimum of 3 semester units:

AIS 100*[F97], 104*[F09], 105*[F99], 108A, 108B, 135, 145*[F97], 146, 150*[F97], 166A, 166B, 167A, 167B, 207A, 207B, 266A, 266B
AMS 100*[F97], 105*[F07]
ANTH 135*[F17], 155
ARAB 101, 102, 201
ARCH 120, 121*[F97], 122
ART 100, 102, 104, 105, 163+(F96), 164+(F96), 165, 166, 169
ASL 100, 101, 110*[F17], 205, 206

CHIN 101, 102, 201
CINE 100, 102, 103, 110, 120, 122*[F08], 123
CS 100, 155
DBA 100, 230
DNCE 100, 101*[F98], 102*[F06], 105*[F99]
ENG 205, 210, 211, 215, 220, 221, 225, 226, 230, 240, 245, 250, 255, 260, 265, 270+(F92), 280*[F02], 290
ESL 101, 102, 103, 106+(F19)

FASH 130
FREN 101, 102, 201, 202
GC 101, 102, 115*[F12]
GERM 101, 102, 201, 202, 225
HIST 105, 106
HUM 100, 101
ID 115+(F03), 121+(F20)
ITAL 101+(F97), 102, 201, 202, 225
JAPN 101, 102, 130, 201+(F97), 202+(F97)

MCS 125*[F12]
MUS 100, 101, 102*[F10], 103, 169+(F17), 171+(F96)*[F98]
PHIL 111, 114, 121, 122, 125, 126, 140, 141, 250
PHOT 125
RS 101*[F18], 104, 105, 108, 110*[F97]
SPAN 101, 101A, 101B, 102, 201, 202, 211, 212, 235+(F14)
TA 100*[F18], 150

Course: _____   C   IP   N

Area D: Social and Behavioral Sciences – Minimum of 3 semester units:

AIS 101*[F97], 102, 110*[F98], 115*[F97], 125*[F97], 130, 140*[F97], 165+(F96)*[F99]
AJ 100
AMS 200+(F95)*[F97]
ANTH 105*[F97], 107*[F16], 110, 115, 125, 126+(F96), 130, 137*[F08], 140*[F97]
AS 100*[F16], 101*[F16], 102*[F16], 120*[F98], 126+(F96)
CHDV 100, 110, 115, 172+(F20)

COMM 100, 105*[F98]
CS 101*[F16], 102*[F16]
ECON 100, 101, 102, 110, 115*[F97], 120, 125
ENG 150
GCMW 100
GEOG 103, 105*[F12]
HIST 101, 102, 107, 108, 121+(F07)*[F99], 130*[F97], 140*[F03], 141*[F03], 150+(F94)*[F06], 151+(F94)*[F06], 160

LS 121+(F05), 240+(F05)*[F00-X11]
MCS 100*[F98], 125, 160, 200+(F95)*[F97]
POSC 100, 101, 102, 110, 121, 240
PSYC 100, 105+(F05), 110, 120, 125, 130+(F95), 211, 225+(F07), 235+(F07)

RS 102*[F08], 103+(F08-F10; F18), 108
SOC 100, 105+(F05), 110, 115*[F04], 125, 130*[F08], 135*[F11], 165*[F14], 175*[F18], 200+(F05)*[F97]
SPCH 120, 131*[F97]

Course: _____   C   IP   N

Area E: Lifelong Learning and Self-Development – Minimum of 3 semester units:

AODS 150+(F08)
BIOL 185
BUS 100, 136
CHDV 100+(F05)

COUN 100, 110*[F01], 115, 120*[F01], 148*[F17]
CSIT 105
FCS 136

HE 100, 165
LT 120
NUTR 120*[F15], 165, 185
PSYC 105, 115, 125, 145, 150+(F08)

READ 105, 110
SOC 105, 125, 130*[F08], 145, 150+(F08)
SPCH 115
*Military Credit

Course: _____   C   IP   N

*A minimum of 3 semester units of ACE recommended credit for completion of Basic/Recruit Training is required.

Legend: +(FXX) – Approval date of course for an area - course taken prior to date indicated may not be used for the GE area
*[FXX] – Approval date of multicultural designation- course taken prior to date indicated may not be used to satisfy the multicultural requirement

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Additional Degree Information

Additional Associate Degrees

Additional Associate degrees may be earned in other majors with the exception of General Studies and University Studies. Students may earn only <u>one</u> General Studies and <u>one</u> University Studies degree.

1. Students who have received an Associate degree, and maintained continuous enrollment, may pursue subsequent degrees by fulfilling the major or area of emphasis requirements.
2. Students who have received an Associate degree, but did not maintain continuous enrollment, may pursue a new major or area of emphasis under the catalog of readmission.
3. Students who have received an Associate degree, but did not maintain continuous enrollment, may pursue subsequent degrees by fulfilling the major or area of emphasis, GE, and District requirements under the catalog of readmission.
4. Students with an Associate degree from another college must pursue subsequent degrees in a different major at Palomar by fulfilling the major or area of emphasis, GE, and District requirements under the catalog of readmission.

Catalog Rights and Continuous Enrollment Criteria

Eligibility for graduation is determined by catalog rights and continuous enrollment. Students who do not wish to use the catalog in effect at the time they began continuous enrollment should indicate which catalog they wish to use; otherwise, the catalog under which they began continuous enrollment, or the current catalog, will be used.

Continuous enrollment is defined as attendance in one semester or two quarters (excluding summer) within a calendar year (January through December) in the CSU, UC, or California Community Colleges system following initial enrollment at Palomar. A student must have received a letter grade (including "W") in the semesters of attendance to maintain 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, or the date the degree is awarded.

Course Work Limitation

Some departments (such as Automotive Technology) may require that course work for career/technical majors or areas of emphasis be completed within a specified period of time to the granting of the Associate degree.

Notice of Intent to Graduate

When all District and General Education Requirements are completed or in progress, students should submit a Petition for Graduation to the Evaluations Office in the Student Services Center, room SSC-40. Petitions are available in the Counseling or Transfer Centers, the Evaluations Office, or online. Deadlines are strictly adhered to; petitions 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, Associate in Science degrees, Associate in Arts for Transfer, and Associate in Science for Transfer, 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 Achievement (CA) Requirements

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. Students who wish to use coursework from other institutions towards the certificate or wish to pursue additional Palomar degrees should submit official transcripts to the Records Office. In addition to the course requirements, students should be aware of the following:

1. 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.
2. Equivalent courses from other institutions may be determined by the Evaluations Office. Certificate credits or courses may be substituted or further equivalencies determined with written justification and approval of the Department Chair/Director.
3. Continuous enrollment is defined as attendance in one semester or two quarters (excluding summer) within a calendar year (January through December) in the CSU, UC, or California Community Colleges system following initial enrollment at Palomar. 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, or the date the degree is awarded.
4. 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 a Petition for Graduation to the Evaluations Office in the Student Services Center, room SSC-40. Petitions are available online, in Counseling, Transfer Center, or the Evaluations Office. Deadlines are strictly adhered to; petitions must be submitted no later than the dates listed below:

Spring graduation – February 28th
Summer graduation – June 30th
Fall graduation – September 30th

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 a Petition for Graduation to the Evaluations Office. Petitions are available in the Counseling Center, Transfer Center, Evaluations Office, or online.
4. Petitions 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.

Noncredit Certificate of Completion (CN) Requirements

Noncredit Certificates of Completion are designed to lead to improved employability or job opportunities that prepare a student to progress in a career path or to undertake credit courses. 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 satisfactory grade must be achieved in all certificate course work.
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. Petitions must be submitted no later than:
   Spring deadline – February 28th
   Summer deadline – June 30th
   Fall deadline – September 30th
5. Certificates of Completion 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 INFORMATION <u>7</u>

Section 7
Transfer Information

Associate Degree for Transfer Requirements
General Education Transfer Pattern Requirements
CSU System Information
UC System Information

California Community Colleges are now offering Associate Degrees for Transfer to the CSU. These degrees include Associate in Arts for Transfer (AA-T) or Associate in Science for Transfer (AS-T) degrees. These degrees are designated to provide a clear pathway to a CSU major and baccalaureate degree. California Community College students who are awarded an AA-T or AS-T degree are granted admission with junior standing within the CSU System and given priority admission consideration to their local CSU campus when a program is deemed similar to their community college major. This priority does not guarantee admission to specific majors or campuses.

Students who have been awarded an AA-T or AS-T are able to complete their remaining requirements for the 120-unit baccalaureate degree within 60 semester or 90 quarter units.

To view the most current list of Palomar College Associate Degrees for Transfer and to find out which CSU campuses accept each degree, go to http://adegreewithaguarantee.com/ Major requirements are listed under the corresponding discipline in Section 8. Current and prospective community college students are encouraged to meet with a counselor to review their options for transfer and to develop an educational plan that best meets their goals and needs.

Associate Degree for Transfer Requirements

I. Minimum Units
The Associate degree for transfer requires completion of a minimum of sixty (60) CSU-transferable semester units. Courses numbered 1-99 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 CSU-transferable course work attempted.

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

IV. Major
Complete a minimum of 18 semester units in an AA-T or AS-T major as detailed in Section 8 of the catalog. All courses in the major must be completed with a grade of C or better (Title 5, 55063). Although courses in the major may be taken for Pass/No Pass grading, it is not recommended.

V. District Requirements
Students following Associate Degrees for Transfer (AA-T or AS-T) are not held to Palomar College District Requirements.

VI. General Education Requirements
Complete the California State University General Education Breadth (CSU GE Breadth) certification OR the Intersegmental General Education Transfer Curriculum (IGETC) certification. Refer to the CSU GE or IGETC Requirements listings in this section or see a counselor for more information.

* Students completing IGETC may be awarded the degree, but they must complete a course from Area 1C: Oral Communication to meet California State University (CSU) admission requirements.

Additional Degree Information

Catalog Rights and Continuous Enrollment Criteria
Eligibility for graduation is determined by catalog rights and continuous enrollment. Students who do not wish to use the catalog in effect at the time they began continuous enrollment should indicate which catalog they wish to use; otherwise, the catalog under which they began continuous enrollment, or the current catalog, will be used.

Continuous enrollment is defined as attendance in one semester or two quarters (excluding summer) within a calendar year (January through December) in the CSU, UC, or California Community Colleges system following initial enrollment at Palomar. A student must have received a letter grade (including "W") in the semesters of attendance to maintain 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, or the date the degree is awarded.

Notice of Intent to Graduate
When all requirements are completed or in progress, students should submit a Petition for Graduation to the Evaluations Office in the Student Services Center, room SSC-40. Petitions are available online, in the Counseling or Transfer Centers, or the Evaluations Office. Deadlines are strictly adhered to; petitions 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
Associate in Arts for Transfer and Associate in Science for Transfer degrees will be conferred formally at the Commencement Ceremony held in May at the end of each spring semester. However, students will receive their degree following the close of the semester in which they apply for graduation.

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 numerous private, independent colleges in California, as well as out-of-state universities, offer a broad 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; it is advisable to apply to more than one university

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

To prepare for transfer, students must decide which campus they will attend through research in the Transfer Center, located in the SSC Building, and consult a counselor for the specific requirements for that particular campus and to create an educational plan. 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. Palomar College maintains articulation agreements with many colleges and universities which list courses that satisfy general education requirements and lower division major preparation for transfer. For more detailed information, go to www.palomar.edu/counseling/transfercenter.

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

Students planning to transfer to a California State University should plan a program to meet the admissions and graduation requirements of the specific institution that they plan to attend. **Due to budget constraints, the CSU System will have reduced enrollment spaces for new students. See a counselor to inquire about individual campus requirements.**

Upper Division Transfer Admission Requirements

Minimum eligibility requirements for admission include the following, but may not be competitive for all campuses and/or majors:

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 General Education 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 must apply online at www2.calstate.edu/apply

Fall Semester or Quarter	October 1-November 30 of prior year
Spring Semester	August 1-August 30 of the prior year

NOTE: Filing an application on time, correctly, and completing the required follow-up steps can make the difference between being accepted or not. Not all CSU are open in spring/winter.

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.

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, Advanced Placement exams, and International Baccalaureate exams must be on file before submitting the petition, and will be reviewed for inclusion in the certification process.

Advanced Placement (AP) Program

Palomar College will accept AP exams toward fulfillment of CSU GE requirements. Please refer to the AP Exam at www2.palomar.edu/pages/articulation/ap-ib-clep-and-dantes/ for acceptable general education scores and placement. Please see a counselor for AP acceptance toward major preparation and units toward transfer.

College Level Examination Program (CLEP)

Palomar College will accept some CLEP exams toward fulfillment of CSU GE requirements. Please refer to the CLEP Exam Chart at www2.palomar.edu/pages/articulation/ap-ib-clep-and-dantes/ for acceptable general education scores and placement. Please see a counselor for CLEP acceptance toward major preparation and units toward transfer.

International Course Work

Palomar College will not include international course work on the GE certification. Due to the varying policies in the acceptance of international transcripts, the determination regarding their use is left to the transfer institution.

International Baccalaureate (IB) Program

Palomar College will accept some IB exams toward fulfillment of CSU GE requirements. Please refer to the IB Exam Chart at www2.palomar.edu/pages/articulation/ap-ib-clep-and-dantes/ for acceptable general education scores and placement. Please see a counselor for IB acceptance toward major preparation and units toward transfer.

Petition for Certification

Upon enrollment in final requirements, students should submit a Petition for Graduation to the Evaluations Office via email to evaluations@palomar.edu or to Student Services Center, room SSC-40.

GE Course Effective Dates

Dates in parentheses (Fxx) following a course indicate the approval of the course for an area. Courses taken prior to date indicated would not be acceptable for meeting a general education requirement.

CSU GE Breadth for STEM

CSU-GE Breadth for STEM is only approved for the Associate in Science in Biology for Transfer Degree. This pattern allows students to defer completion of one course from CSUGE Area C and one course from CSUGE Area D until after transfer. Students earning the AS-T in Biology with this pattern must complete the following before transfer:
- All required courses in Areas A, B, and E
- One course in Area C1, Arts;
- One course in Area C2, Humanities
- Two courses in Area D, Social Sciences, from two different academic disciplines

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.

PALOMAR COLLEGE
California State University General Education (CSUGE) Requirements
Fall 2020 – Summer 2021

The California State University (CSU) General Education-Breadth pattern is one **o**ption that allows California Community College transfer students to fulfill the lower-division general education requirements of any California State University campus. The pattern includes 39 lower-division semester units with a minimum cumulative 2.0 GPA required, which may be certified by California Community Colleges. Partial certification may be granted by Area (A, B, C, D, or E). Full certification may be granted if all areas and units are completed. Courses may only be certified in one area and must be on the list at the time it was completed. Please see a counselor for specific information regarding major preparation.

C: Complete **IP**: In Progress **N**: Need

AREA A: ENGLISH LANGUAGE COMMUNICATION AND CRITICAL THINKING - "C-"grade or higher required. Minimum of 9 semester units - 3 courses required; One from each group below:

A1. Oral Communication - SPCH 100   Course: _____   C IP N

A2. Written Communication - ENG 100 or **ESL** 110   Course: _____   C IP N

A3. Critical Thinking – **ENG** 202, 203; **PHIL** 113, 116, 200;
READ 120+(F04); **SPCH** 105   Course: _____   C IP N

AREA B: SCIENTIFIC INQUIRY AND QUANTITATIVE REASONING - Three courses and a minimum of 9 semester units are required. Select one course from B1, B2, and B4. To satisfy B3, one course must include a corresponding lab from B1 or B2. Courses with a lab included are underlined and lab only courses are identified with "L":

B1. Physical Science

ASTR 100, 105L, 120	**ES** 100, 100L, 115	**OCN** 100, 100L
CHEM <u>100</u>, <u>104</u>, <u>105</u>, 110, 110L, 115, 115L, 205+(F07), <u>220</u>, <u>221</u>	**GEOG** 100, 100L, 110, 115+(F98), 125	**PHSC** 100, 100L, 101, 101L
	GEOL 100, 100L, 110, 120, 150, 150L	**PHYS** <u>101</u>, 102, <u>120</u>, <u>121</u>, <u>200</u>, <u>201</u>, <u>230</u>, <u>231</u>, <u>232</u>

Course:_____   C IP N

B2. Life Science

ANTH 100, 100L, <u>101</u>
BIOL <u>100</u>, 101, 101L, <u>102</u>, <u>105</u>, 106, 110, 114+(F98), 114L+(F98), 118, 118L+(F98), 120, <u>125</u>, 126, 126L, <u>130</u>, 131, 131L, 135+(F09), <u>140</u>, 141, 141L, 145, 145L+(F93), <u>200</u>, <u>201</u>, <u>210</u>, <u>211</u>+(F93), <u>212</u>
PSYC <u>210</u>

Course: _____   C IP N

B3. Laboratory Activity - This requirement is met by selecting any underlined lecture course with a lab from B1 or B2 or by completing any lab (L) course with its corresponding lecture.   Course: _____   C IP N

B4. Mathematics/Quantitative Reasoning - "C-" grade or higher required.
BUS 204+(F19); **MATH** 100, 101, 105, 106+(F98), 110, 115, 120, 126, 127, 130, 135, 140, 141+(F98), 200+(F92), 205+(F98), 206+(F98), 245+(F07);
PSYC 205; **SOC** 205

Course: _____   C IP N

AREA C: ARTS AND HUMANITIES - Minimum of 9 semester units – 3 courses required, with at least one course from Arts and 1 course from Humanities, and an additional course from either category:

C1. Arts (Arts, Cinema, Dance, Music, Theatre)

AIS 104, 105, 135, 146	**DBA** 100	**MUS** 100, 101, 102, 103, 169+(F17), 171+(F96)
ARCH 120, 121, 122	**DNCE** 100, 101, 102, 105	**PHOT** 125
ART 100, 102, 104, 105, 163+(F96), 164+(F96), 165, 166, 169	**FASH** 130	**TA** 100, 150
CINE 100, 102, 103, 110, 120, 122	**GC** 101, 115	
	ID 115+(F09), 121+(F20)	

Course: _____   C IP N

C2. Humanities (Literature, Philosophy, Languages other than English)

AIS 100, 107A+(F16), 107B+(F16), 108A, 108B, 145, 150, 166A, 166B, 167A, 167B, 207A, 207B, 266A, 266B	**ENG** 205, 210, 211, 215, 220, 221, 225, 226, 230, 240, 245, 250, 255, 260, 265, 270+(F92), 280, 290	**HUM** 100, 101
AMS 100, 105		**ITAL** 101+(F98), 102, 201, 202, 225
ANTH 135, 155	**ESL** 101, 102, 103, 106+(F19)	**JAPN** 101, 102, 130, 201+(F97), 202+(F97)
ARAB 101, 102, 201	**FREN** 101, 102, 201, 202	**MCS** 125 160
ASL 100, 101, 110, 205, 206	**GC** 102	**PHIL** 111, 114, 121, 122, 125, 126, 140, 141, 250
CHIN 101, 102, 201+(F01)	**GERM** 101, 102, 201, 202, 225	**RS** 101, 104, 105, 108, 110
CINE 123	**HIST** 101+(F15), 102+(F15), 105, 106, 107+(F15), 108+(F15), 121+(F16), 130+(F16), 140+(F16), 141+(F16), 150+(F16), 151+(F16), 160	**SPAN** 101, 101A, 101B, 102, 201, 202, 211, 212, 235+(F14)
CS 100, 140+(F16), 155		

Course: _____   C IP N

Additional C1 or C2 Course – Choose any course not already taken from C1 or C2.
Course:_____   C IP N

Legend: +(FXX) – Approval date of course for an area - course taken prior to date indicated may not be used for the GE area

CSU 05/11/2020

AREA D: SOCIAL SCIENCES – Minimum of 9 semester units – 3 courses required from at least 2 disciplines:

AIS 101, 102, 110, 115, 125, 130, 140, 165+(F96)
AJ 100
AMS 200+(F95)
ANTH 105, 107, 110, 115, 125, 126+(F96), 130, 137, 140
AS 100, 101, 102, 120, 126+(F96)
ASL 110+(F17)
CHDV 100, 110, 115, 172+(F20)

COMM 100, 105
CS 101, 102, 140+(F16)
ECON 100, 101, 102, 110, 115, 120, 125
ENG 150
GCMW 100+(F09)
GEOG 103, 105
HIST 101, 102, 105+(F15), 106+(F15), 107, 108, 121+(F07), 130, 140, 141, 150+(F94), 151+(F94), 160

LS 121+(F15), 240+(F16)
MCS 100, 125, 160, 200+(F95)
POSC 100, 101, 102, 110, 121, 240+(F16)
PSYC 100, 105+(F05), 110, 120, 130+(F95), 211, 225+(F07), 235+(F07)
RS 102, 103+(F08-F10; F19), 108
SOC 100, 105+(F05), 110, 115, 130, 135, 165, 170, 175, 200+(F95)
SPCH 120, 131+(F97)

Course: _____	C IP N
Course:_____	C IP N
Course:_____	C IP N

AREA E: LIFELONG LEARNING AND SELF-DEVELOPMENT – Minimum of 3 semester units:

AODS 150+(F08)
BIOL 185
BUS 136+(F15)
CHDV 100+(F05)
COUN 110, 115, 120+(F02), 148

CSIT 105
FCS 136+(F15)
HE 100, 165
NUTR 120, 165, 185

PSYC 105, 115, 125, 145, 150+(F08)
READ 105, 110
SOC 105, 125, 130, 145, 150+(F08)
SPCH 115

*Military Credit: A minimum of 3 semester units of ACE recommended credit for completion of Basic/Recruit Training is required

Course:_____	C IP N

CSU Graduation Requirement in U.S. History, Constitution, and American Ideals - This area is not required for certification.

Choose a pair:
AIS 101+102; AS 101+102; CS 101+102; HIST 101+102; HIST 140+141; POSC 101+102; RS 102+(F08)+RS 103+(F19)

-OR-

Choose two courses to complete US Areas 1, 2, and 3.
- Courses may be used in more than one area
- Courses may be used to partially satisfy Areas C2 or D

US – 1		US - 2		US - 3	
AIS 101, 102	**POSC** 101+(F16)	**AIS** 101+(F16)	**LS** 240+(F16)	**AIS** 102	**HIST** 102, 141
AS 101, 102	**RS** 102+(F08)	**AS** 101+(F16)	**POSC** 101, 102, 240+(F16)	**AS** 102	**POSC** 102, 120+(F09)
CS 101, 102		**CS** 101		**CS** 102	**RS** 103+(F19)
HIST 101, 102, 140, 141		**HIST** 101+(F16), 140+(F16)	**RS** 103+(F19)		

Circle each US Area completed or in progress.	US 1, 2, 3	Course: _____	C IP N
Circle each US Area completed or in progress.	US 1, 2, 3	Course: _____	C IP N

Certification Deadlines:

Students must petition for certification in the Evaluations Office located in SSC-40. The recommended deadlines for priority certification are as follows:
Completing Requirements: ....Apply By:
- ➢ Spring Semester ....February 28th
- ➢ Summer Session...June 30th
- ➢ Fall Semester ....September 30th

Notes:

_____
_____
_____
_____
_____

Legend: +(FXX) – Approval date of course for an area - course taken prior to date indicated may not be used for the GE area CSU 05/11/2020

The University of California (UC) System

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

Berkeley	Davis
Irvine	Los Angeles
Merced	Riverside
Santa Barbara	Santa Cruz
San Diego	

Each campus of the University of California accepts course work from the California Community Colleges 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. 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

Minimum eligibility requirements for admission include the following, but may not be competitive for all campuses and/or majors.

1. Complete 60 UC transferrable units 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 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. Applications may be accessed at http://www.universityofcalifornia.edu.

All other campuses:

Fall Quarter/Fall Semester	Nov. 1 – 30 the year prior
Winter Quarter	July 1 – 31* the summer prior

*Not all UC campuses will be open for the winter.

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 3.0 or higher GPA depending upon the major.

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 to which they intend to transfer.

The IGETC transfer certification pattern is listed above under Transfer Planning 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 IGETC is either not accepted 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 Petition for Graduation/Transfer Certification form, along with the Advising Guide (signed by a Counselor) to the Evaluations Office. Official transcripts from other colleges and universities, Advanced Placement exams, and International Baccalaureate exams must be on file before submitting the petition, and will be reviewed for inclusion in the certification process.

Transfer Admission Guarantee Programs

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

Each Transfer Admission Guarantee program varies in regard to eligibility, terms of transfer, minimum grade point average (GPA), etc. Visit the Transfer Center or the Transfer Center web page at http://www.palomar.edu/counseling/transfercenter for additional updated information.

The following is a list of UC campuses with which Palomar College has admission guarantee programs. These Transfer Admission Guarantee programs are referred to as TAGs.

University of California, Davis (UCD)
Palomar College participates in a TAG program with UC Davis, which guarantees admission to the university and to most majors.

University of California, Irvine (UCI)
Palomar College participates in a TAG program with UC Irvine, which guarantees admission to the university and to most majors.

University of California, Merced (UCM)
Palomar College participates in a TAG program with UC Merced, which guarantees admission to the university and to all majors.

University of California, Riverside (UCR)
Palomar College participates in a TAG program with UC Riverside, which guarantees admission to the university and all majors.

University of California, Santa Barbara (UCSB)
Palomar College participates in a TAG program with UC Santa Barbara, which guarantees admission to the university; however, not a guarantee into the major.

University of California, Santa Cruz (UCSC)
Palomar College participates in a TAG program with UC Santa Cruz, which guarantees admission to the university; however, not a guarantee into the major.

University of California, San Diego (UCSD) University Link Program

Graduating high school seniors are eligible for this program which promotes preparation for guaranteed admission to UCSD. This program links Palomar students with counselors from Palomar and UC San Diego. Contact the Counseling Center for additional information. This program is also available for veteran students.

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 all CSU or most 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. Upon enrollment in final requirements, the student must submit a Petition for Graduation/Transfer Certification form 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. Specific limitations are indicated with the course descriptions in the PC Catalog or available on the assist website at http://www.assist.org.

6. Students who initially enrolled at a UC campus and attend a community college are not eligible to use IGETC for the same campus.
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 many course requirements on IGETC. Please refer to the AP Exam Chart on the Articulation website (www.palomar.edu/articulation/) for acceptable scores and placement. See a counselor for AP acceptance toward major prep and units toward transfer.
9. International Baccalaureate (IB) exams can be used to satisfy many course requirements on IGETC. Please refer to the IB Exam Chart on the Articulation website (www.palomar.edu/articulation/) for acceptable scores and placement. See a counselor for IB acceptance toward major prep and units toward transfer.
10. If transferring to a UC, a high school transcript demonstrating 2 years of the same foreign language with a final grade of 'C' or better will satisfy Area 6. An official high school transcript must be on file with the Records Office.
11. 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.
12. For partial IGETC certification information, make an appointment with a counselor through the Counseling Center.

GE Course Effective Dates
Dates in parentheses (Fxx) following a course indicate the approval of the course for an area. Courses taken prior to date indicated would not be acceptable for meeting a general education requirement.

IGETC GE Breadth for STEM
IGETC for STEM is only approved for the Associate in Science in Biology for Transfer Degree. This pattern allows students to defer completion of one course from IGETC Area 3, one course from IGETC Area 4, and one course in Area 6 (Language Other Than English/LOTE -- for students who have not previously satisfied LOTE through proficiency) until after transfer. Students earning the AS-T in Biology with this pattern must complete the following before transfer:

- All required courses in Areas 1, 2, and 5
- One course from Area 3A, Arts
- One course from Area 3B, Humanities;
- Two courses in Area 4, Social and Behavioral Sciences, from two different academic disciplines

This certification is only accepted by UC if the UC major program or college accepts partial IGETC certification. Please see a counselor for details.

PALOMAR COLLEGE
Intersegmental General Education Transfer Curriculum (IGETC) Requirements
Fall 2020 - Summer 2021

The IGETC General Education pattern fulfills lower-division general education transfer requirements for transfer to the University of California (UC) or California State University (CSU). Courses may only be used during the time they were approved for IGETC. See a counselor for details. All courses used for IGETC require a grade of "C" or better. A "C-"grade is not acceptable. A course may be certified in one area only with the exception of Area 6 double counting in 3B. IGETC may not be appropriate for selective majors at the UC. Consult a counselor for details. Students who initially enrolled at a UC campus, and attend a community college are not eligible to use IGETC for the same UC campus.

C: Complete **IP:** In Progress **N:** Need

AREA 1: ENGLISH COMMUNICATION – CSU: Minimum of 9 semester units-3 courses required, 1 from each group below; **UC**: Minimum of 6 semester units – 1 course each from groups 1A and 1B:

1A. English Composition - ENG 100 or **ESL** 110   Course: _____   C IP N

1B. Critical Thinking – **ENG** 202, 203; **PHIL** 200   Course: _____   C IP N

1C. Oral Communication - (*CSU Requirement only*) **SPCH** 100   Course: _____   C IP N

AREA 2: MATHEMATICAL CONCEPTS AND QUANTITATIVE REASONING - Minimum of 3 semester units – 1 course required:

BUS 204+(F19); **MATH** 101**,** 110, 120, 126, 127, 130, 135, 140, 141, 200+(F92), 205, 206, 245+(F07)**; PSYC** 205+(F96); **SOC** 205+(F96)

Course: _____   C IP N

AREA 3: ARTS AND HUMANITIES - Minimum of 9 semester units – 3 courses required, with at least one course from Arts and one course from Humanities, and an additional course from either category:

3A. Arts
AIS 104, 105, 135, 146
ARCH 120, 121
ART 100, 163+(F96), 164+(F96), 165, 166, 169

CINE 100, 102, 103, 110, 120+(F95), 122
DNCE 100, 101, 102, 105

GC 115
MUS 100, 101, 102, 169+(F17), 171+(F96)

PHOT 125
TA 100, 150

Course: _____   C IP N

3B. Humanities
AIS 100, 107B+(F16), 108A+(F16), 108B+(F16), 145, 150, 166B+(F16), 167A, 167B, 207A+(F16), 207B+(F16), 266A, 266B
AMS 100, 105
ANTH 135, 155
ARAB 201
ASL 110+(F16), 205+(F18), 206+(F18)
CHIN 201+(F01)

CINE 123
CS 100, 140+(F16), 155
ENG 205, 210, 211, 215, 220, 221, 225, 226, 230, 240, 245, 250, 255, 260, 265, 270+(F93), 280+(F93), 290
ESL 103+(F19), 106+(F19)
FREN 201+(F97), 202+(F97)
GC 102

GERM 201+(F97), 202+(F97), 225
HIST 101+(F15), 102+(F15), 105, 106, 107+(F15), 108+(F15), 121+(F16), 130+(F16), 140+(F16), 141+(F16), 150+(F16), 151+(F16), 160
HUM 100, 101
ITAL 201+(F01), 202, 225
JAPN 130, 201+(F97), 202+(F97)

MCS 125, 160
PHIL 111, 114, 121, 122, 125, 126, 140, 141
RS 101, 104, 105, 108, 110
SPAN 201+(F97), 202+(F97), 211+(F16), 212, 235+(F14)

Course: _____   C IP N

Additional 3A or 3B Course – Choose any course not already taken from 3A or 3B.
Course: _____   C IP N

AREA 4: SOCIAL AND BEHAVIORAL SCIENCES – Minimum of 9 semester units – 3 courses from at least 2 disciplines:

AIS 101, 102, 110, 115, 125, 130, 140, 165+(F96)
AJ 100+(F92)
AMS 200+(F95)
ANTH 105, 107, 110, 115, 125, 126+(F96), 130, 140
AS 100, 101, 102, 120, 126+(F96)
ASL 110+(F17)
CHDV 100, 115+(F20), 172+(F20)
COMM 100+(F92), 105+(F92)

CS 101, 102, 140+(F16)
ECON 100, 101, 102, 110, 115, 120, 125
ENG 150
GCMW 100+(F10)
GEOG 103, 105
HIST 101, 102, 105+(F15), 106+(F15), 107, 108, 121+(F07), 130, 140, 141, 150+(F95), 151+(F95), 160

LS 121+(F15), 240+(F16)
MCS 100, 125, 160, 200+(F95)
POSC 100, 101, 102, 110, 121, 240+(F16)
PSYC 100, 105+(F05), 110, 120, 125, 130+(F08), 211, 225+(F07), 235+(F07)
RS 102, 103+(F08-F10; F19), 108

SOC 100, 105+(F05), 110, 115, 125, 130, 135, 165, 170, 175, 200+(F95)
SPCH 120+(F93)

Course: _____   C IP N

Course: _____   C IP N

Course: _____   C IP N

Legend: +(FXX) – Approval date of course for an area - course taken prior to date indicated may not be used for the GE area   IGETC 05/11/2020

AREA 5: PHYSICAL AND BIOLOGICAL SCIENCES - Two courses and a minimum of 7 semester units are required. Select one course from 5A and one course from 5B. One course must include a corresponding laboratory. Courses with a lab included are underlined and lab only courses are identified with "L":

5A. Physical Sciences

ASTR 100, 105L, 120	**GEOG** 100, 100L, 110+(F92), 115+(F98), 125+(F08)	**PHSC** 100, 100L
CHEM <u>100</u>, <u>104</u>, <u>105</u>, 110, 110L, 115, 115L, 205+(F07), <u>220</u>, <u>221</u>	**GEOL** 100, 100L, 120, 150, 150L	**PHYS** <u>101</u>, 102, <u>120</u>, <u>121</u>, <u>200</u>, <u>201</u>, <u>230</u>, <u>231</u>, <u>232</u>
ES 100, 100L, 115	**OCN** 100, 100L	

Course: _____   C   IP   N

5B. Biological Sciences

ANTH 100, 100L, <u>101</u>

BIOL <u>100</u>, 101, 101L, <u>102</u>+(F93), <u>105</u>, 106, 110, 114+(F98), 114L+(F00), 118+(F93), 118L+(F98), 120, <u>125</u>, 126, 126L, <u>130</u>, 131, 131L, 135+(F09), <u>140</u>, 141, 141L, 145+(F92), 145L+(F93), <u>200</u>, <u>201</u>, <u>210</u>, <u>211</u>+(F93), <u>212</u>

PSYC <u>210</u>

Course: _____   C   IP   N

5C. Laboratory Activity - This requirement is met by selecting any underlined lecture course with a lab from 5A or 5B or by completing any lab (L) course with its corresponding lecture.

Course: _____   C   IP   N

AREA 6: LANGUAGE OTHER THAN ENGLISH – *(UC Requirement Only)* High school transcripts required to demonstrate proficiency equivalent to 2 years of high school study in the same language:

AIS 107B+(F16), 108A+(F16), 108B+(F16), 166B+(F16), 167A, 167B, 207A+(F16), 207B+(F16)	**ARAB** 101 **ASL** 100+(F02)	**CHIN** 101 **FREN** 101	**GERM** 101 **ITAL** 101+(F97)	**JAPN** 101 **SPAN** 101, 101B

Course: _____   C   IP   N

CSU Graduation Requirement in U.S. History, Constitution, and American Ideals - This area is not required for certification.

Choose a pair:

AIS 101+102; AS 101+102; CS 101+102; HIST 101+102; HIST 140+141; POSC 101+102; RS 102+(F08)+RS103+(F19)

-OR-

Choose two courses to complete US Areas 1, 2, and 3.

- Courses may be used in more than one area
- Courses may be used to partially satisfy Areas 3B or 4

US – 1		US - 2		US - 3	
AIS 101, 102	**POSC** 101+(F16)	**AIS** 101+(F16)	**LS** 240+(F16)	**AIS** 102	**HIST** 102, 141
AS 101, 102	**RS** 102+(F08)	**AS** 101+(F16)	**POSC** 101, 102, 240+(F16)	**AS** 102	**POSC** 102, 120+(F09)
CS 101, 102		**CS** 101	**RS** 103+(F19)	**CS** 102	**RS** 103+(F19)
HIST 101, 102, 140, 141		**HIST** 101+(F16), 140+(F16)			

Circle each US Area completed or in progress.   US 1, 2, 3   Course: _____   C   IP   N

Circle each US Area completed or in progress.   US 1, 2, 3   Course: _____   C   IP   N

Certification Deadlines:

Students must petition for certification in the Evaluations Office located in SSC-40. The recommended deadlines for priority certification are as follows:

Completing Requirements:...Apply By:
- ➤ Spring Semester ....February 28th
- ➤ Summer Session...June 30th
- ➤ Fall Semester ....September 30th

Notes:

_____

_____

_____

_____

_____

Legend: +(FXX) – Approval date of course for an area - course taken prior to date indicated may not be used for the GE area   IGETC 05/11/2020

IGETC EFFECTIVE DATES

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

Fall 2006 Additions
ANTH 101; ARAB 101B, 201A, 201B; DNCE 102, MCS 122

Fall 2007 Additions:
AMS 105; CHEM 104; CS 130, 135; MCS 120, 124; TA 150

Fall 2008 Additions:
BIOL 215; CHEM 205, 205L; CINE 122; DT 120, 121; HIST 121, 135; JS 106, 107; MATH 245; PHIL 103; PSYC 225, 235; RS 102, 103, 106, 107, 124; SOC 130

Fall 2009 Additions:
AIS 104; ANTH 107, 145; CHIN 201A, 201B; GC 102, GEOG/GEOL 125; ITAL 201A; PSYC 130; RS 108; SPAN 201A, 201B; SPCH 125

Fall 2010 Additions:
BIOL/ZOO 135

Fall 2011 Additions:
GC 110; GCMW 100; SOC 135

Fall 2012 Additions:
ECON 120; GC 115; MCS 115, 125

Fall 2013 Additions:
ARAB 101; ART 163, 164; CINE 123

Fall 2014 Additions:
AIS 146, 167A, 167B; ECON 125; PHIL 111, 121, 122; RS 104; SOC 165; SPAN 212, 235

Fall 2015 Additions:
AIS 266A, 266B; ES 100L; JAPN 130; LS 121; POSC 121

Fall 2016 Additions:
AIS 107B, 108A, 108B, 121, 166B, 207A, 207B; AMS 121; ART 169; ASL 110; CS 140; HIST 160; LS 240; MCS 160; POSC 240; SOC 170; SPAN 211

Fall 2017 Additions:
ASL 110; MUS 169

Fall 2018 Additions:
ASL 205, 206

Fall 2019 Additions:
BUS 204, ESL 103, ESL 106, GERM 225, ITAL 202, ITAL 225, PSYC 211, RS 103, SOC 175
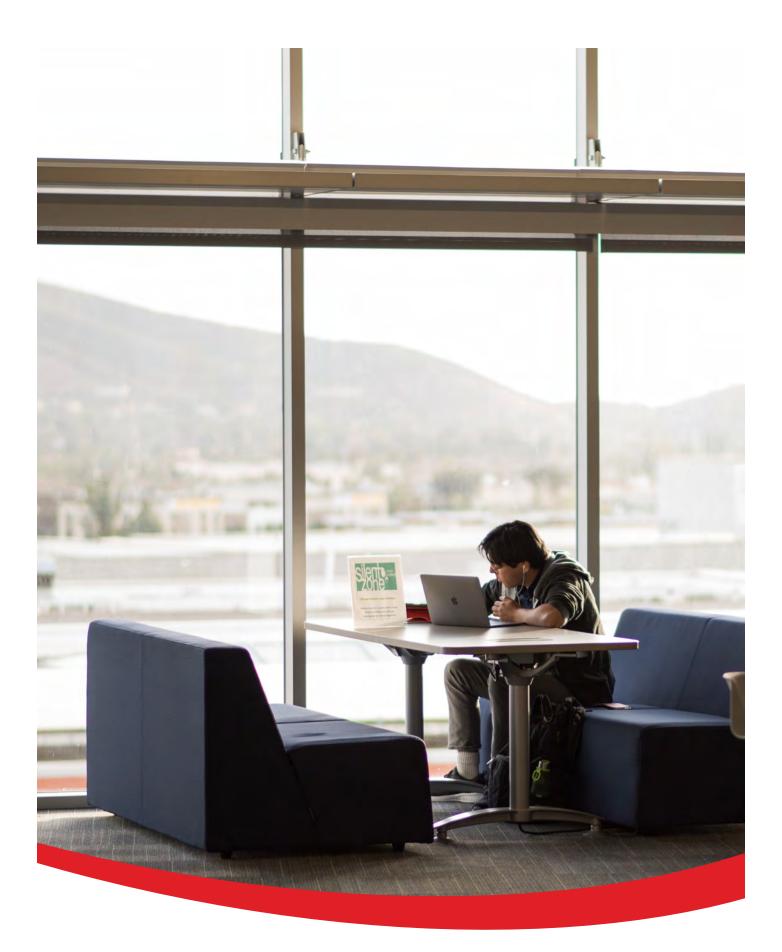
Private and Out-of-State Universities

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.

Financial aid may be a primary factor in considering attending an private 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.

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 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 & CREDIT COURSES <u>8</u>

Section 8
Programs and Credit Courses

Degrees and Certificates

AA=Associate Degree • AA-T, AA-S = CSU Transfer Degree • CA= Certificate of Achievement • CP=Certificate of Proficiency

Major		AA-T AS-T	A.A.	A.S.	CA	CP	Page
Accounting (ACCT)							
	Accounting			X	X		90
	Bookkeeping/Accounting Clerk					X	99
Administration of Justice (AJ)							
	Administration of Justice	X					91
	Administration of Justice-General			X			90
	Administration of Justice-Homeland Security			X			90
	Administration of Justice-Investigations			X			91
	Administration of Justice-Law Enforcement			X			91
	Basic Police Academy				X		98
Air Conditioning, Heating and Refrigeration (ACR)							
	Air Conditioning, Heating and Refrigeration			X	X		92
	Air Conditioning, Heating and Refrigeration Entry Employment Ready					X	93
Alcohol and Other Drug Studies (AODS)							
	Alcohol and Other Drug Studies			X	X		93
American Indian Studies (AIS)							
	American Indian Studies				X		93
American Sign Language (ASL)							
	American Sign Language/English Translation and Interpreting			X	X		94
	Deaf Studies		X				109
Anthropology (ANTH)							
	Anthropology	X					94
	Archaeological Field Technician				X		95
	Archaeological Surveyor and Laboratory Assistant				X		95
	Archaeology		X				95
Apprenticeship (AP)							
	Acoustical Installer			X	X		90
	Carpentry			X	X		101
	Drywall/Lather			X	X		111
	Electrician			X	X		113
	Inside Wireman			X	X		124
	Intelligent Transportation			X	X		124
	Military Leadership			X	X		130
	Plasterer			X	X		136
	Sheet Metal			X	X		140
	Sound and Communication Systems Installer			X	X		141
	Sound Technician			X	X		141

AA=Associate Degree • AA-T, AA-S = CSU Transfer Degree • CA= Certificate of Achievement • CP=Certificate of Proficiency

Major		AA-T AS-T	A.A.	A.S.	CA	CP	Page
Architecture (ARCH)							
	Architecture			X	X		96
	Architectural Drafting			X	X		95
Art (ART)							
	Art History	X					96
	Graphic Design			X			122
	Illustration			X			123
	Pictorial Arts: Painting		X				136
	Studio Arts	X					142
	Three-Dimensional Arts: Ceramics		X				144
	Three-Dimensional Arts: Crafts		X				144
	Three-Dimensional Art: Glass		X				145
	Three-Dimensional Art: Jewelry and Metalsmithing		X				145
	Three-Dimensional Arts: Sculpture		X				145
Astronomy (ASTR)							
	Astronomy			X	X		96
Auto Body (AB)							
	Auto Collision Repair			X	X		97
Auto Technology (AT)							
	Auto Chassis and Drive Lines			X	X		97
	Auto Computer Controls and Electronic Tune Up			X	X		97
	Electronic Tune Up and Computer Control Systems			X	X		113
	Auto Mechanics-General			X	X		97
Biology (BIOL)							
	Biology	X					98
	Biology-Preprofessional			X	X		99
Business (BUS)							
	Administrative Assistant			X	X		91
	Business Administration	X					99
	Business-General			X			100
	Business Information Worker				X		100
	E-Marketing			X	X		111
	Medical Office Specialist			X	X		130
	Retail Management				X		139
	Social Media				X		140
Business Management (BMGT)							
	Business Management			X	X		100
	Creating Your Business in a Gig Economy					X	107

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Major		AA-T AS-T	A.A.	A.S.	CA	CP	Page
Cabinet and Furniture Technology (CFT)							
	Cabinetmaking and Millwork			X	X		101
	Case Furniture Construction/Manufacturing			X	X		102
	Guitar Making Technology			X	X		122
	Lathe Tuning Technology			X	X		128
	Table and Chair Manufacturing			X	X		143
	Veneering Technology			X	X		148
	Woodworking Fundamentals				X		150
	Woodworking Skills Technology			X	X		150
Chemistry (CHEM)							
	Chemistry			X	X		102
Child Development (CHDV)							
	Assistant Teacher					X	96
	Child and Adolescent Development	X					102
	Child Development: Child and Family Services			X	X		103
	Child Development: Administration			X	X		103
	Early Childhood Education	X					111
	Child Development Master Teacher: Early Inclusion			X	X		103
	Child Development Master Teacher: Infant/Toddler			X	X		104
	Child Development Teacher			X	X		104
	Child Development: School Age Assistant					X	104
Cinema (CINE)							
	Cinema		X		X		104
	Film, Television, and Electronic Media	X					116
Communications (COMM)							
	Communications Studies	X					105
	Public Relations					X	137
Computer Science and Information Technology-Computer Science (CSCI)							
	Computer Science			X	X		106
	Computer Science with Emphasis in Video Gaming			X	X		107
	Video Game Developer					X	148
Computer Science and Information Technology-Information Technology (CSIT)							
	Computer Information Systems (CIS): Data Analytics			X	X		105
	Cybersecurity			X			107
	Information Technology			X	X		123
	Management Information Systems			X	X		128
Computer Science and Information Technology-Networking (CSNT)							
	Computer Network Administration With Emphasis: Cisco			X	X		106
	Computer Network Administration With Emphasis: Linux			X	X		106
	Computer Network Administration With Emphasis: Microsoft			X	X		106
Computer Science and Information Technology-Web Technology (CSWB)							
	Web Design and Development			X	X		149
	Web Development				X		149

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Major		AA-T AS-T	A.A.	A.S.	CA	CP	Page
Dance (DNCE)							
	Dance-Emphasis in Euro-Western Dance		X		X		107
	Dance-Emphasis in General Dance		X		X		108
	Dance-Emphasis in World Dance		X		X		108-109
	Musical Theatre Preparation				X		131
Dental Assisting (DA)							
	Registered Dental Assisting			X	X		139
Diesel Mechanics Technology (DMT)							
	Diesel Technology			X	X		109
Digital Broadcast Arts (DBA)							
	Broadcast Journalism					X	99
	Digital Media					X	109
	Digital Video			X	X		110
	Radio and Television		X		X		137
Drafting Technology (DT)							
	CAD/CAM Design and Manufacturing			X			101
	Drafting and Design CADD/CAM Technology			X	X		110
	Mechanical Engineering Drafting and Design Technology			X	X		129
	Electrical Engineering Drafting and Design Technology			X	X		113
Economics (ECON)							
	Economics	X	X		X		112
Emergency Medical Education (EME)							
	EMT Basic					X	113
	Paramedic Training			X	X		134-135
Engineering (ENGR)							
	Engineering			X			114
English (ENG)							
	English	X	X				114-115
Fashion (FASH)							
	Fashion Design			X	X		116
	Fashion Merchandising			X	X		116
	Fashion: Visual Merchandising			X	X		116
Fire Technology (FIRE)							
	Fire Academy			X	X		117
	Fire Technology-Emergency Management			X	X		117
	Fire Technology-General			X	X		118
French (FREN)							
	French		X		X		118

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Major		AA-T AS-T	A.A.	A.S.	CA	CP	Page
Gender and Women's Studies							
	Gender and Women's Studies		X				119
General Studies							
	Emphasis in Arts and Humanities			X			119
	Emphasis in Science and Mathematics			X			120
	Emphasis in Social and Behavioral Sciences			X			120
Geography (GEOG)							
	Advanced Geographic Information Systems			X	X		92
	Drone Applications and Technologies			X			110
	Drone Operations				X		110
	Geography	X					120
	Environmental Studies				X		115
	Geographic Information Systems					X	120
Geology (GEOL)							
	Geology	X		X			121
German (GERM)							
	German		X		X		122
Graphic Communications-Imaging and Publishing (GCIP)							
	Digital Imaging			X	X		108
	Graphic Communications			X	X		121
	Screen Printer					X	140
	Screen Printing			X	X		140
Graphic Communications-Multimedia & Web (GCMW)							
	Digital Media					X	109
	Digital Video			X	X		110
	Interactive Media Design: Emphasis in 3D Modeling and Animation			X	X		125
	Web: Front End Design			X	X		150
	New Media Compositing, Authoring and Distribution			X	X		132
Health Occupations							
	See Emergency Medical Education, Dental Assisting, and Nursing Education						
History (HIST)							
	History	X					123
Industrial Technology (IT)							
	Foundations in Technical Careers					X	118
Information Technology							
	See Computer Science and Information Technology						
Interior Design (ID)							
	Interior Design			X	X		125
Internet							
	See Graphic Communications-Multimedia and Web, and Computer Science and Information Technology-Web Technology						
Italian (ITAL)							
	Italian		X		X		126

AA=Associate Degree • AA-T, AA-S = CSU Transfer Degree • CA= Certificate of Achievement • CP=Certificate of Proficiency

Major		AA-T AS-T	A.A.	A.S.	CA	CP	Page
Japanese (JAPN)							
	Japanese		X		X		126
Journalism (JOUR)							
	Broadcast Journalism					X	99
	Journalism	X					126
	Multimedia Journalism			X	X		130
Kinesiology (KINE)							
	Adult Fitness and Health				X		92
	Kinesiology	X	X				126-127
Legal Studies (LS)							
	Legal Support Assistant					X	128
Library Technology (LT)							
	Library and Information Technology			X	X		128
Mathematics (MATH)							
	Mathematics	X		X			129
Music (MUS)							
	Basic Music Skills					X	98
	Music	X	X				130-131
Networking							
	See Computer Science and Information Technology-Networking						
Nursing Education (NURS)							
	Nursing		X	X			132-133
	Nursing for LVNs		X	X			132-133
	Non-Degree 30 Unit Option for LVNs						133-134
	AA or AS Degree in Nursing for Diploma RNs		X	X			134
Nutrition (NUTR)							
	Nutrition and Dietetics	X					134
Office Information Systems							
	See Business						
Philosophy (PHIL)							
	Philosophy	X					135
Photography (PHOT)							
	Commercial Photography					X	105
	Photography		X		X		135
Physical Education							
	See Kinesiology						
Physiology							
	See Biology						

AA=Associate Degree • AA-T, AA-S = CSU Transfer Degree • CA= Certificate of Achievement • CP=Certificate of Proficiency

Major		AA-T AS-T	A.A.	A.S.	CA	CP	Page
Political Science							
	Political Science	X					136
Psychology (PSYC)							
	Alcohol and Other Drug Studies			X	X		93
	Psychology	X					137
Real Estate (RE)							
	Real Estate Appraisal License Preparation					X	138
	Real Estate Broker License Preparation			X	X		138
	Real Estate Salesperson License Preparation					X	139
Registered Dental Assisting							
	See Dental Assisting						
Sign Language							
	See American Sign Language						
Sociology (SOC)							
	Sociology	X					140-141
Spanish (SPAN)							
	Spanish	X			X		141
Speech (SPCH)							
	Communication Studies	X					105
	Speech Communication		X				142
Theatre Arts (TA)							
	Technical Theatre		X		X		143
	Theatre Arts	X	X				144
University Studies							
	California State University General Education Breadth				X		119
	Intersegmental General Education Transfer Curriculum				X		125
	University Studies		X	X			146-148
Wastewater Technology Education (WWT)							
	Wastewater Technology Education			X	X		149
Water Technology Education (WTE)							
	Water Technology Education			X	X		149
Web							
	See Computer Science and Information Technology-Web Technology						
Welding (WELD)							
	Entry-Level Gas Metal Arc/Flux Cored Arc Welding					X	115
	Entry-Level Gas Tungsten Arc Welding					X	115
	Entry-Level Shielded Metal Arc Welding					X	115
	Welding Technology			X	X		150

Discipline	Certificate name	Certificate of Completion	Certificate of Competency	Page
Noncredit Adult Basic Education (N ABED)				
	Adult Basic Education	X		**286**
Noncredit Apprenticeship (N AP PRE)				
	Pre-Apprenticeship		X	**287**
Noncredit Basic Education (N BASC)				
	College Preparation		X	**288**
Noncredit Business Management (N BMGT)				
	Project Management		X	**288**
Noncredit ESL (N ESL)				
	Computer Skills for ESL	X		**286**
	Conversation Skills for ESL	X		**286**
	English as a Second Language	X		**286**
	Grammar Skills for ESL	X		**286**
	Speaking Skills for ESL	X		**286**
Noncredit Medical Professions (N MEDC)				
	Medical Professions Prep.		X	**291**

ACCOUNTING (AS, CA)

The Associate in Arts Degree and/or Certificate of Achievement in Accounting is designed to prepare the graduate for entry into positions in industry, public accounting firms, government, and nonprofit organizations. The graduate will have an understanding of accounting and business concepts.

A.S. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT

Program Requirements		
ACCT 104	Accounting Spreadsheet Concepts	2
ACCT 105	Individual Income Taxes	4
ACCT 107	Taxation of Business Entities	4
ACCT 110	Quickbooks	2
ACCT 115	Sales Tax, Payroll Taxes, and Employee Benefits	2
ACCT 201	Financial Accounting	4
ACCT 202	Managerial Accounting	4
BUS 110	Business Mathematics	3
	or	
MATH 120	Elementary Statistics	4
	or	
MATH 130	Calculus for Business and the Social Sciences	4
BUS 117	Legal Environment of Business	3
BUS 125	Business English	3
	or	
BUS 205	Business Communication	3
TOTAL UNITS		**31 - 32**

ACOUSTICAL INSTALLER (AS, CA)

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.S. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT

Program Requirements		Units
AP DL/AP AC/		
AP PL 701	Orientation	1.5
AP DL/AP PL/		
AP AC 702	Safety and Health Certifications	1.5
AP DL/AP PL/		
AP AC 703	Printreading	1.5
AP DL/		
AP AC 704	Advanced Printreading	1.5
AP AC 705	Acoustical Ceilings	1.5
AP AC 706	Standard Acoustical Grids	1.5
AP AC 707	Suspended Ceilings	1.5
AP AC 708	Soffits	1.5
AP AC 709	Prefab/Sound Panels	1.5
AP AC 710	Concealed/Glue-Up/Staple-Up System	1.5
AP AC 711	Designer and Specialty Trims	1.5
AP AC 712	Metal Pan and Security Systems	1.5
AP AC 713	Advanced Acoustical Installation	1.5
AP AC 714	Advanced Acoustical Layout	1.5
AP AC 715	Drywall Acoustical Ceilings	1.5
AP WE 712	Drywall/Acoustical Work Experience	4
TOTAL UNITS		**26.5**

ADMINISTRATION OF JUSTICE – GENERAL (AS)

This program prepares students for a career in the criminal justice system or private security services. The program will give students general knowledge and skills in theory, principles, and techniques of law enforcement agencies and private security services.

A.S. 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 106	Police Ethics	3
AJ 180	Criminology	3
*CE 100	Cooperative Education	3
Electives (Select 12 units)		
AJ 65	Preparation for Law Enforcement	3
AJ 97	Topics in Administration of Justice	.5 - 20
AJ 140	Criminal Justice in the 21ST Century - Field Study	1.5
AJ 197	Topics in Administration of Justice	.5 - 6
TOTAL UNITS		**36**

Cooperative Education must be related to this major.

ADMINISTRATION OF JUSTICE - HOMELAND SECURITY (AS)

This program prepares students for a career in the public or private job sector providing security services to institutions, government entities (Department of Homeland Security and Transportation Security Administration), and the general public. This program will give students general knowledge and skills of Homeland Security.

A.S. 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 106	Police Ethics	3
AJ 151	Introduction to Terrorism	3
AJ 152	Weapons of Mass Destruction	3
AJ 153	Issues in Homeland Security	3
AJ 180	Criminology	3
*CE 100	Cooperative Education	3
FIRE 131	Introduction to Emergency Management	3
TOTAL UNITS		**36**

Cooperative Education must be related to this major.

It is recommend that a student working towards an associate degree in Homeland Security take two of the following courses: POSC 110; SOC 110; and/or PSYC 120.

ADMINISTRATION OF JUSTICE – INVESTIGATIONS (AS)

This program prepares students for a career in the public or private sector providing general knowledge and skills in theory, principles, and techniques of forensic science and investigation in the criminal justice system.

A.S. 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 106	Police Ethics	3
AJ 110	Basic Criminal Investigation	3
AJ 141	Enforcement Psychology	3
AJ 180	Criminology	3
AJ 210	Basic Crime Scene Forensic Science	3
AJ 211	Fingerprint Identification	3
*CE 100	Cooperative Education	3
TOTAL UNITS		**36**

Cooperative Education must be related to this major.

ADMINISTRATION OF JUSTICE – LAW ENFORCEMENT (AS)

This program prepares students with the general knowledge and skills required for a career in municipal and county law enforcement as a sworn peace officer.

A.S. 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 106	Police Ethics	3
AJ 110	Basic Criminal Investigation	3
AJ 115	Patrol Procedures	3
AJ 131	Juvenile Justice	3
AJ 141	Enforcement Psychology	3
AJ 180	Criminology	3
*CE 100	Cooperative Education	3
TOTAL UNITS		**36**

Cooperative Education must be related to this major.

ADMINISTRATION OF JUSTICE (AS-T)

The field of Administration of Justice is directed toward the prevention, discovery, control and treatment of crimes, criminals, and criminality. This Associate in Science in Administration of Justice for Transfer (A.S.-T.) degree provides a path to students who wish to transfer to a CSU campus in Administration of Justice. The degree allows students to learn the fundamental principles and practices of law enforcement, the court system, and the corrections systems. Students who major in Administration of Justice are preparing for a wide variety of career opportunities in such areas as uniformed police officer, investigation, criminal identification, criminalistics, and corrections.

Pursuant to SB1440, the following completion requirements must be met:
(1) Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:

(A) The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements.

(B) A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.

(2) Obtainment of a minimum grade point average of 2.0."

ADTs also require that students must earn a C or better in all courses required for the major or area of emphasis. A "P" (Pass) grade is also an acceptable grade for courses in the major if the course is taken on a Pass/No Pass basis.

AS-T TRANSFER MAJOR

List A: Program Requirements		
AJ 100	Introduction To Criminal Justice	3
AJ 104	Criminal Law	3

List B: Select 2 courses		
AJ 101	Criminal Evidence	3
AJ 102	Criminal Procedures	3
AJ 103	Community Relations	3
AJ 110	Basic Criminal Investigation	3
AJ 131	Juvenile Justice	3
AJ 210	Basic Crime Scene Forensic Science	3

List C: Select 2 courses		
PSYC 100	Introduction to Psychology	3
SOC 100	Introduction to Sociology	3
PSYC/SOC 205	Statistics for the Behavioral Sciences	4
	or	
MATH 120	Elementary Statistics	4
TOTAL UNITS		**18 - 19**

ADMINISTRATIVE ASSISTANT (AS, CA)

This program is designed to prepare the student for an entry level or higher office position and reflects significant changes in the level of preparedness in Digital Information Literacy that is required to enter business and industry.

A.S. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT

Program Requirements		
ACCT 101	Bookkeeping	3
BUS 100	Introduction to Business	3
BUS 104	Business Information Systems	3
BUS 110	Business Mathematics	3
BUS 152	Social Media for Business	3
BUS 166	Intermediate Keyboarding	2
BUS 171	Word for Business - Advanced	1
BUS 173	Contemporary Job Search Techniques	1
BUS 176	Excel Intermediate	1
BUS 187	Project for Business	1
BUS 190	Internet for Business	1
BUS 205	Business Communication	3
TOTAL UNITS		**22**

Credit For Certified Administrative Professional (Cap) Certification: Individuals who hold the certification for Certified Professional Secretary (CPS) or Certified Administrative Professional (CAP) may apply to the Business Administration Department for units toward an Administrative Assistant Associate in Arts Degree. The units granted, with a grade of CR, will be posted to the student's transcript upon completion of the remaining AA degree requirements. Students must provide evidence of successful completion of the CPS or CAP certification.

ADULT FITNESS AND HEALTH (CA)

Training for fitness instructors and lifestyle educators in designing, implementing and managing a variety of health/fitness programs.

CERTIFICATE OF ACHIEVEMENT

Program Requirements		Units
CSIT 105	Computer Concepts and Applications	3
EME 100/HE 104	Emergency Medical Responder	3
NUTR/HE 165	Fundamentals of Nutrition	3
HE 100	Health Education and Fitness Dynamics	3
KINE 100	Introduction to Physical Education and Kinesiology	3
PSYC 100	Introduction to Psychology	3
BIOL 211	Physiology	4

Group I (Select a minimum of 3 units)

CE 100	Cooperative Education	1 - 4
ENG 100	English Composition	4
	or	
ESL 110	College Composition for Non-Native Speakers	4
MATH 120	Elementary Statistics	4
SPCH 100	Oral Communication	3

Group II (Select a minimum of 3 units)

PSYC 115	The Psychology of Personal Growth and Development	3
PSYC 210	Physiological Psychology	4
SOC/PSYC 125	Human Sexuality	3
BIOL 210	Anatomy	4

Group III (Select a minimum of 1 unit)

KINE 125A	Aerobic Fitness Training Modes	1 - 2
KINE 125B	Anaerobic Fitness Training Modes	1 - 2
KINE 125C	Functional Fitness Training Modes	1 - 2
KINE 125D	Motor Fitness/Hand-Eye/Foot Skills	1 - 2
KINE 168A	Beginning Soccer	1 - 2
KINE 168B	Intermediate Soccer	1 - 2
KINE 168C	Advanced Soccer	1 - 2
KINE 170A	Team Sports - Baseball Strategies	1 - 2
KINE 170B	Team Sports- Baseball Biomechanics	1 - 2
KINE 170C	Team Sports- Basketball Strategies	1 - 2
KINE 170D	Team Sports- Basketball Biomechanics	1 - 2
KINE 170E	Team Sports- Football Strategies	1 - 2
KINE 170F	Team Sports- Football Biomechanics	1 - 2
KINE 170G	Team Sports- Soccer Strategies	1 - 2
KINE 170H	Team Sports- Soccer Biomechanics	1 - 2
KINE 170I	Team Sports- Softball Strategies	1 - 2
KINE 170J	Team Sports- Softball Biomechanics	1 - 2
KINE 170O	Team Sports- Wrestling Strategies	1 - 2
KINE 170P	Team Sports- Wrestling Biomechanics	1 - 2
KINE 231	Water Safety Instruction	3

Group IV - Health/Fitness Courses (Select 1 course)

HE 100L	Health Performance Lab	1 - 2
KINE 128A	Wellness Modalities - Cardio	1 - 2
KINE 128B	Wellness Modalities -Muscular	1 - 2
KINE 128C	Wellness Modalities - Functional	1 - 2
KINE 128D	Wellness Modalities - Periodization	1 - 2
KINE 140A	Beginning Tennis - Techniques and Analysis	1 - 2
KINE 140B	Intermediate Tennis - Techniques and Analysis	1 - 2.5
KINE 140C	Advanced Tennis - Techniques and Analysis	1 - 2
KINE 150A	Beginning Weight Training	1 - 2
KINE 150B	Intermediate Weight Training - Strength Training for Total Fitness	1 - 2
KINE 150C	Advanced Weight Training - Power Lifting and Plyometrics Training	1 - 2
TOTAL UNITS		**30 - 31**

ADVANCED GEOGRAPHIC INFORMATION SYSTEMS (AS, CA)

The Advanced Geographic Information Systems (GIS) Certificate program at Palomar College is designed to provide students with the technical and theoretical knowledge needed to pursue a successful career in growing field of geospatial analysis. Through a combination of lectures, learning modules, case studies, internships, and projects, students will learn to manage, plan, and implement GIS projects.

A.S. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT

Program Requirements		Units
GEOG 120	Digital Earth: Introduction to Geographic Information Systems	4
GEOG 132	Database Management and Data Acquisition	4
GEOG 134	GIS Applications and Programming	2
GEOG 136	Intermediate ArcGIS: GIS Analysis	2
GEOG 139	GIS Specialist Internship	2

Specialized concentration (Select 2 courses)

GEOG 140	Introduction to Remote Sensing and Drone Data Processing	3
GEOG 142	Environmental Applications of GIS	1
GEOG 143	Introduction to Cartography and Computer Mapping	1
GEOG 144	Internet Mapping and Application Development	3
GEOG 150	Geographic Information Science and Spatial Reasoning	3

Electives (Select 1 course)

CSIT 150	Introduction to SQL	3
CSWB 120	JavaScript and jQuery	3
TOTAL UNITS		**19 - 23**

AIR CONDITIONING/HEATING/ REFRIGERATION (AS)

Air Conditioning, Heating, and Refrigeration program is designed to provide students with the knowledge and hands-on learning skills in the air conditioning and refrigeration industry. Applications of theory, principles and techniques will include system components and their interrelated functions, safety, procedures, tools and equipment. Proper testing and evaluation skills to trouble shoot and perform repairs as required. The program also provides retraining and upgrading of skills for maintenance technicians, including EPA certification.

A.S. DEGREE MAJOR

Required Courses		Units
ACR 101	Air Conditioning, Heating, and Refrigeration: Mechanical	3
ACR 102	Air Conditioning, Heating, and Refrigeration: Electrical	3
ACR 103	Air Conditioning, Heating, and Refrigeration: Heating	3
ACR 105	Refrigerant Management and Recovery	1
ACR 110	Advanced Air Conditioning, Heating and Refrigeration	3
ACR 112	HVAC Controls and Automation	3
IT 108	Technical Mathematics	3
IT 115	Industrial Safety	2
CE 100	Cooperative Education	3 - 4
WELD 160	Metal Layout for Fabrication	3
TOTAL UNITS		**27 - 28**

AIR CONDITIONING/HEATING/ REFRIGERATION (CA)

Air Conditioning, Heating, and Refrigeration program is designed to provide students with the knowledge and hands-on learning skills in the air conditioning and refrigeration industry. Applications of theory, principles and techniques will include system components and their interrelated functions, safety, procedures, tools, and equipment. Proper testing and evaluation skills to trouble shoot and perform repairs as required. The program also provides retraining and upgrading of skills for maintenance technicians, including EPA certification.

CERTIFICATE OF ACHIEVEMENT

Program Requirements		Units
ACR 101	Air Conditioning, Heating, and Refrigeration: Mechanical	3
ACR 102	Air Conditioning, Heating, and Refrigeration: Electrical	3
ACR 103	Air Conditioning, Heating, and Refrigeration: Heating	3
ACR 105	Refrigerant Management and Recovery	1
ACR 110	Advanced Air Conditioning, Heating and Refrigeration	3
ACR 112	HVAC Controls and Automation	3
TOTAL UNITS		**16**

AIR CONDITIONING, HEATING AND REFRIGERATION ENTRY EMPLOYMENT READY (CP)

Air Conditioning, Heating, and Refrigeration program is designed to provide students with the knowledge and hands-on learning skills in the air conditioning and refrigeration industry. Applications of theory, principles and techniques will include system components and their interrelated functions, safety, procedures, tools, and equipment to prepare the student for entry level employment in the HVAC field.

CERTIFICATE OF PROFICIENCY

Program Requirements		
ACR 101	Air Conditioning, Heating, and Refrigeration: Mechanical	3
ACR 102	Air Conditioning, Heating, and Refrigeration: Electrical	3
ACR 103	Air Conditioning, Heating, and Refrigeration: Heating	3
ACR 105	Refrigerant Management and Recovery	1
TOTAL UNITS		**10**

ALCOHOL AND OTHER DRUG STUDIES (AS, CA)

Provides the student with the academic training and hands on experience for entry-level employment in delivery of alcohol and other drug treatment services in agency settings and serves as a preparation for California state examinations as a certified addictions treatment counselor by CAADE and as a certified alcoholism and drug abuse counselor by CAADAC.

A.S. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT

Program Requirements		Units
PSYC 100	Introduction to Psychology	3
PSYC/SOC/ AODS 150	Introduction to Alcohol and Other Drug Studies	3
PSYC/SOC/ AODS 155	The Physiology and Pharmacology of Psychoactive Drugs	3
PSYC/SOC/ AODS 160	Prevention, Intervention, and Education	3
PSYC 225	Psychology of Abnormal Behavior	3
PSYC/SOC/ AODS 250	Group Leadership and Process	3

PSYC/SOC/ AODS 255	Case Management, Law and Ethics	3
PSYC/SOC/ AODS 260	Chemical Dependency Family Counseling	3
AODS/PSYC/ SOC 299	Directed Field Experience II	3
AODS 299L	Directed Field Experience II Lab	2 - 3

Group One (Select 3 units)
SOC 100	Introduction to Sociology	3
SOC 110	Social Problems	3

Group Two (Select 4-5 units)
PSYC/SOC/ AODS 140	Introduction to Psychological and Social Services	3
PSYC 140L	Introduction to Psychological and Social Services Lab	1-3
PSYC/SOC/ AODS 298	Directed Field Experience I	3
PSYC 298L	Directed Field Experience I	2-3
TOTAL UNITS		**36 - 38**

AMERICAN INDIAN STUDIES (CA)

The Certificate in American Indian Studies provides cultural knowledge and insight recognized by prospective employers such as state, federal, and tribal government agencies. Earning an AIS Certificate affords increased employment opportunities in such fields as archaeology, art, museums, education, social services, and resource management.

CERTIFICATE OF ACHIEVEMENT

Program Requirements		Units
AIS 100	Introduction to American Indian Studies	3
AIS 101	The American Indian Frontier or	
AIS 102	Indian/U.S. Political System	3
AIS 105	History of Native American Arts	3
AIS 125	American Indians Today	3
AIS/ANTH 130	Prehistoric Cultures of North America	3

Electives
Complete a minimum of 6 units chosen from at least two categories.

Arts
AIS 104	The Music of Native America	3
AIS 135	California Indian Arts	3
AIS 145	American Indian Literature	3
AIS 146	American Indian Theatre, Dance and Music	3

History
AIS 110	History of the Plains Indian	3
AIS 115	A History of Southwest Indians	3
AIS/ANTH 140	The Original Californians	3

Language
AIS 107A	Elementary Luiseño IA	3
AIS 107B	Elementary Luiseño IB	3
AIS 108A	Elementary Luiseño IIA	3
AIS 108B	Elementary Luiseño IIB	3
AIS 151	Elementary Cupeño IA	3
AIS 167A	Elementary Cahuilla IIA	3
AIS 167B	Elementary Cahuilla IIB	3
AIS 266A	Cahuilla IIIA	3
AIS 266B	Cahuilla IIIB	3

Social and Behavioral Sciences
AIS 150	American Indian Philosophy and Religion	3
AIS 165	Native Women in the Americas	3
TOTAL UNITS		**21**

AMERICAN SIGN LANGUAGE/ENGLISH TRANSLATION & INTERPRETING STUDIES (AS, CA)

Preparation courses (for students not already competent in signing): ASL 100, 100L, 101, 101L, 105, 205, 205L, 206, and 206L.

This program provides an integrated series of coursework in American Sign Language (ASL) and ASL/English translation and interpreting studies to prepare students for entry-level positions in the Deaf community. Students are introduced to models of discourse analysis and theoretical models of translation and interpretation. Emphasis is on the practical application of models and knowledge as they develop skills in ASL and English, translation and interpretation, cultural competence, human relations, ethical decision-making, social justice and equity, and professionalism. Extensive service learning is an integral aspect of this program.

 American Sign Language/English interpreters are in demand locally, regionally, and nationally. A highly qualified American Sign Language/English interpreter who pursues higher education opportunities and continued skill development will enjoy a rewarding, highly flexible career. This profession is expanding, and continued growth in the job market is projected.

A.S. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT

Program Requirements		Units
ASL 110	Awareness of Deaf Culture	3
ASL 115	Perspectives on Deafness	3
ASL 208	Interpreting as a Profession	3
ASL 210	Discourse Analysis	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
	or	
ESL 110	College Composition for Non-Native Speakers	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.

ANTHROPOLOGY (AA-T)

The Associate in Arts in Anthropology for Transfer provides students with the holistic study of humanity which prepares them for transfer into the CSU system for completion of a Baccalaureate degree program in Anthropology. Depending on the classes selected, students may receive humanities, multicultural, and laboratory or non-laboratory science credit on general education patterns for both the UC and CSU systems. The Associate in Arts in Anthropology for Transfer emphasizes the four-field approach central to American Anthropology in which students are introduced to the holistic integration of the biological, cultural, linguistic, and material cultural approaches to the study of human beings. Through their courses in Biological Anthropology program students will gain a basic understanding of the evidence, patterns, and genetic basis, of both human and primate evolution as well as the biological underpinnings of human culture. Cultural Anthropology coursework explores the universal patterns of human cultural organization, the origins and function of the arts and religion, the central role of kinship, the nature of gender, and the dynamics of cultural evolution. The structure and complexity of human language and its critical role in the human experience is the subject of Anthropological Linguistics courses. A wide range of Archaeology courses are also available by which students may gain the tools to explore past and present societies thorough knowledge of the production, use, and discard of human material culture.

Pursuant to SB1440, the following completion requirements must be met:

(1) Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:

(A) The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements.

(B) A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.

(2) Obtainment of a minimum grade point average of 2.0.

ADTs also require that students must earn a C or better in all courses required for the major or area of emphasis. A "P" (Pass) grade is also an acceptable grade for courses in the major if the course is taken on a Pass/No Pass basis.

AA-T TRANSFER MAJOR

Program Requirements

*ANTH 100	Introduction to Biological Anthropology and	3
*ANTH 100L	Biological Anthropology Laboratory or	1
ANTH 101	Introduction to Biological Anthropology	4
*ANTH 105	Introduction to Cultural Anthropology	3
ANTH 110	Introduction To Archaeology	3

List A: Select one course

ANTH 107	Language and Culture	3
ANTH 135	Magic, Witchcraft, and Religion	3
AIS 100	Introduction to American Indian Studies	3
MATH 120	Elementary Statistics or	4
PSYC/SOC 205	Statistics for the Behavioral Sciences	4

List B: Select one course, or any course from List A not already used
Science Methods

PSYC 230	Research Methods in Psychology	4

Sciences

ES 100	The Earth As a System: Case Studies of Change In Space and Time and	3
ES 100L	Earth Systems Laboratory	1
GEOG 120	Digital Earth: Introduction to Geographic Information Systems	4
GEOL 100	Physical Geology and	3
GEOL 100L	Geology Laboratory	1
ZOO 200	Anatomy	4

List C: Select one course, or any course from List A or B not already used

ANTH 115	Comparative Societies	3
ANTH 120	Archaeological Excavation	3
ANTH 121	Cultural Resource Management	3
ANTH 125	Evolution, Science and Religion	3
ANTH /AS 126	Cultures of Africa	3
ANTH /AIS 130	Prehistoric Cultures of North America	3
ANTH 137	Medical Anthropology: Culture, Illness and Healing	3
ANTH/AIS 140	The Original Californians	3
ANTH/CS 155	Ancient Civilizations of Meso-America	3
ANTH 205	Prehistoric Archaeological Excavation	3
ANTH 206	Historical Archaeological Excavation	3
ANTH 210	Archaeological Surveying	3
ANTH 215	Archaeological Laboratory Analysis	3
ANTH 220	Advanced Archaeological Surveying	3
ANTH 225	Historical Archaeology	3
TOTAL UNITS		**18 - 22**

*Course is required major preparation at CSU San Marcos (CSUSM). Students planning to transfer to CSUSM are advised to select these courses to complete this degree. For more information on this major at CSUSM, please refer to the articulation agreement at ASSIST.ORG.

ARCHAEOLOGICAL FIELD TECHNICIAN (CA)

The Archaeological Field Certificate program provides the student with basic training for an entry level position as an archaeological field or laboratory technician. Archaeological technicians are employed by Cultural Resource Management Firms, Environmental Firms, and various agencies throughout the United States.

CERTIFICATE OF ACHIEVEMENT

Program Requirements

ANTH 105	Introduction to Cultural Anthropology	3
ANTH 110	Introduction to Archaeology	3
*ANTH 120	Archaeological Excavation	3
ANTH 121	Cultural Resource Management	3
ANTH 215	Archaeological Laboratory Analysis	3
ANTH 210	Archaeological Surveying	3
ANTH 225	Historical Archaeology	3
	Or	
GEOG 120	Digital Earth: Introduction to Geographic Information Systems	4
	Or	
AIS 100	Introduction to American Indian Studies	3

TOTAL UNITS: 21.00 - 22.00

* Classes marked with an asterisk (*) are transferable for up to 6 units of upper-division credit for the Anthropology major at CSU San Marcos.

ARCHAEOLOGICAL SURVEYOR AND LABORATORY ASSISTANT (CA)

Prepares student for employment as an archaeological surveyor and laboratory assistant.

CERTIFICATE OF ACHIEVEMENT

Program Requirements		**Units**
ANTH 100	Introduction to Biological Anthropology	3
ANTH 105	Introduction to Cultural Anthropology	3
ANTH 110	Introduction to Archaeology	3
*ANTH 120	Archaeological Excavation	3
*ANTH 205	Prehistoric Archaeological Excavation	
	or	
*ANTH 220	Advanced Archaeological Surveying	3
*ANTH 210	Archaeological Surveying	3
*ANTH 215	Archaeological Laboratory Analysis	3

TOTAL UNITS   **21**

* Classes marked with an asterisk (*) are transferable for up to 6 units of upper-division credit for the Anthropology major at CSU San Marcos.

ARCHAEOLOGY (AA)

Provides the student with in-depth training that will enhance employment opportunities as a professional archaeologist as well as providing a solid foundation for a B.A. and advanced degrees in Anthropology/ Archaeology.

A.A. DEGREE MAJOR

Program Requirements		**Units**
ANTH 100	Introduction to Biological Anthropology	3
ANTH 105	Introduction to Cultural Anthropology	3
ANTH 110	Introduction to Archaeology	3
*ANTH 120	Archaeological Excavation	3

ANTH 121	Cultural Resource Management	3
ANTH/AIS 130	Prehistoric Cultures of North America	3
	or	
*ANTH/AIS 140	The Original Californians	3
*ANTH 205	Prehistoric Archaeological Excavation	3
*ANTH 210	Archaeological Surveying	3
*ANTH 215	Archaeological Laboratory Analysis	3
*ANTH 225	Historical Archaeology	3

Electives (Select 5 units from Groups One and/or Two)
Group One

*AIS 150	American Indian Philosophy and Religion	3
ANTH 107	Language and Culture	3
ANTH 125	Evolution, Science & Religion	3
ANTH/AS 126	Cultures of Africa	3
ANTH 135	Magic, Witchcraft, and Religion	3
ANTH/CS 155	Ancient Civilizations of Meso America	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	Biological Anthropology Laboratory	1
ANTH 197	Topics in Archaeology	1 - 3
ANTH 206	Historical Archaeological Excavation	3
*ANTH 220	Advanced Archaeological Surveying	3
*ANTH 297	Special Problems in Archaeology	1, 2, 3
ANTH 298	Internship in Archaeology	1 - 3
DT/ENGR 101	AutoCAD Intro to Computer Aided Drafting	3
*CE 150	Cooperative Education Internship	2, 3
GEOG 120	Digital Earth: Introduction to Geographic Information Systems	4
GEOG 132	Database Mgmt/Data Acquisition	4
GEOG 134	GIS Applications	2
GEOG 136	Intermediate ArcGIS: GIS Analysis	2
PHOT 130	Digital Darkroom I	3
PSYC/SOC 205	Statistics for the Behavioral Sciences	4

TOTAL UNITS   **35**

* Classes marked with an asterisk (*) are transferable for up to 6 units of upper-division credit for the Anthropology major at CSU San Marcos.

ARCHITECTURAL DRAFTING (AS, CA)

Prepares students for employment as a design/production drafter in the field of Architecture. A drafter will use computer-aided drafting (CAD) or 3D dimensional software (REVIT) to produce designs, working drawings, charts, forms, and records. Coordinate structural, electrical, and mechanical designs and determine a method of presentation to graphically represent building plans. Furthermore, follow building codes, by-laws, space and site requirements, and other technical documents and reports to determine their effect on architectural designs

A.S. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT

Program Requirements		**Units**
ARCH 105	Basic Architectural Drafting	3
ARCH 135	Architectural Materials and Methods of Construction	3
ARCH 295	Architectural Internship	3
ARCH/ID 150	Beginning Computer Aided Drafting	3
ARCH 200	Advanced Computer Aided Drafting	3
ARCH 202	Introduction to Revit Architecture	3
ARCH 204	Advanced Revit	3

TOTAL UNITS   **18**

ARCHITECTURE (AS, CA)

This coursework prepares students for transfer into a university architectural program. Emphasis is on current architectural and construction practices, fundamental design skills, sustainable building guidelines, and transfer preparation. Students should review specific course requirements and transfer agreements with their architectural instructor and transfer counselor. General education course requirements such as mathematics, physics, etc. will vary depending upon the specific university program.

A.S. DEGREE MAJOR OR
CERTIFICATE OF ACHIEVEMENT

Program Requirements		Units
ARCH 105	Basic Architectural Drafting	3
ARCH 120	Architectural History	3
	or	
ARCH 121	Multicultural Architectural History	3
ARCH 122	History of Architectural Theory	3
ARCH 135	Architectural Materials and Methods of Construction	3
ARCH 145	Designing for Communication and Presentation	3
ARCH 215	Design Studio IA	3
ARCH 216	Design Studio IB	3
ARCH 217	Design Studio IIA	3
ARCH 218	Design Studio IIB	3
TOTAL UNITS		**27**

Students should review specific course requirements and transfer agreements with their architectural instructor and transfer counselor. General education course requirements such as mathematics, physics, etc. will vary depending upon the specific university program

ART HISTORY (AA-T)

AA-T TRANSFER MAJOR

The Associate in Arts in Art History for Transfer degree is designed to prepare students for a seamless transfer into the CSU system to complete a baccalaureate degree in Art History. In addition, completing the course work will meet the humanities competency requirement at many colleges and universities. Students may receive humanities credit on general education patterns for both the CSU and UC systems. It will also provide instruction for students seeking visual analytic skills and research knowledge for a variety of other disciplines.

Pursuant to SB1440, the following completion requirements must be met:

(1) Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:

(A) The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements.

(B) A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.

(2) Obtainment of a minimum grade point average of 2.0.

ADTs also require that students must earn a C or better in all courses required for the major or area of emphasis. A "P" (Pass) grade is also an acceptable grade for courses in the major if the course is taken on a Pass/No Pass basis.

Program Requirements		Units
Required Core: (15 units)		
ART 102	Foundations of Drawing	3
ART 104	Design and Composition	3
ART 165	History of Art I - Survey of Western Art	3
ART 166	History of Art II - Survey of Western Art	3
ART 169	Survey of Modern Art	3
List A: Select one course (3 units)		
ART 163	Arts of Asia	3
ART 164	Arts of Africa, Oceania and the Americas	3
TOTAL UNITS		**18**

ASSISTANT TEACHER (CP)

This program includes a selection of courses that provides academic preparation to individuals for a career in the field of child development. The program will give students general knowledge and skills in theory, principles, and techniques for working with young children in an entry level position.

CERTIFICATE OF PROFICIENCY

Program Requirements		Units
CHDV 99	Preparation for Child Development Majors	.5
CHDV 100	Child Growth and Development	3
CHDV 105	Observation and Assessment	3
	and	
CHDV 105A	Observation, Assessment, and Participation Lab: Preschool	1
	or	
CHDV 105B	Observation, Assessment, and Participation Lab: Infant/Toddler	1
	or	
CHDV 105C	Observation, Assessment, and Participation Lab: Early Inclusion	1
CHDV 115	Child, Family, and Community	3
CHDV 120	Health, Safety, and Nutrition	3
CHDV 185	Introduction to Curriculum	3
TOTAL UNITS		**16.5**

ASTRONOMY (CA)

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.

CERTIFICATE OF ACHIEVEMENT

Program Requirements		Units
ASTR 100	Principles of Astronomy	3
ASTR 105L	Introduction to Astronomy Laboratory	1
ASTR/GEOL 120	Planets, Moons and Comets	3
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

AUTO CHASSIS AND DRIVE LINES (AS, CA)

This program will prepare students for entry level positions in all aspects of the Automotive Industry with an emphasis in drive-line repair.

A.S. DEGREE MAJOR OR
CERTIFICATE OF ACHIEVEMENT

Program Requirements		Units
AT 105	Automotive Electricity	2
AT 105L	Automotive Electricity Computer Training Lab	1
AT 120	Automatic Transmissions and Drive Lines	3
AT 130	Automotive Brakes	3
AT 135	Front End Alignment and Wheel Service	3
AT 160	Associated Studies in Automotives	3
AT 170	Auto Repair Shop Experience	2
IT/WELD 108	Technical Mathematics	3
AB 50	Auto Body Repair 1	3
	or	
WELD 100	Welding 1	3
TOTAL UNITS		**23**

AUTO COLLISION REPAIR (AS, CA)

This program will prepare students for an entry level position in the automotive collision repair industry.

A.S. DEGREE MAJOR OR
CERTIFICATE OF ACHIEVEMENT

Program Requirements		
AB 50	Auto Body Repair I	3
AB 51	Auto Body Repair II	3
AB 55	Auto Refinishing I	3
AB 56	Auto Refinishing II	3
IT/WELD 108	Technical Mathematics	3

Elective Courses (Select 6 units)

AT 100	Auto Maintenance and Minor Repair	3
AT 105	Automotive Electricity	3
AT 105L	Automotive Electricity Computer Training Lab	1
AB 97	Auto Body Repair/Auto Refinishing Topics	.5 - 4
AB 105	Chassis Restoration and Assembly	3
AT 170	Auto Repair Shop Experience	2
WELD 100	Welding	3
CE 100	Cooperative Education	1 - 4
TOTAL UNITS		**21**

AUTO COMPUTER CONTROLS AND ELECTRONIC TUNE UP (AS, CA)

This program will prepare students for entry level positions in all aspects of the Automotive Industry with an emphasis in drive-ability concerns.

A.S. DEGREE MAJOR OR
CERTIFICATE OF ACHIEVEMENT

Program Requirements		Units
AT 105	Automotive Electricity	2
AT 105L	Automotive Electricity Computer Training Lab	1
AT 110	Automotive Tune up and Engine Analysis	3
AT 110L	Automotive Tune up and Computer Training Lab	1
AT 115	Automotive Fuel Injection and Fuel Systems	3
AT 115L	Automotive Fuel Systems Computer Training Lab	1
AT 160	Associated Studies in Automotives	3
AT 210	Specialized Automotive Electronics	3
AT 215	Automotive Emission Control	3
IT/WELD 108	Technical Mathematics	3

Electives (Select 6-7 units)

AT 100	Auto Maintenance and Minor Repair	3
AT 165	Automotive Air Conditioning	2
AT 170	Auto Repair Shop Experience	2
DMT 130	Medium-Duty Diesel Engine Tune-Up	4
	or	
DMT 105	Heavy-Duty Diesel Tune-Up and Engine Analysis	4
WELD 100	Welding I	3
CE 100	Cooperative Education	2 - 3
TOTAL UNITS		**27**

AUTO MECHANICS-GENERAL (AS, CA)

This program will prepare students for entry level positions in all aspects of the Automotive Industry.

A.S. DEGREE MAJOR OR
CERTIFICATE OF ACHIEVEMENT

Program Requirements		Units
AT 105	Automotive Electricity	2
AT 105L	Automotive Electricity Computer Training Lab	1
AT 110	Automotive Tune up and Engine Analysis	3
AT 110L	Automotive Tune up Computer Training Lab	1
AT 120	Automatic Transmissions and Drive Lines	3
AT 125	Automotive Machining	3
AT 130	Automotive Brakes	3
AT 160	Associated Studies in Automotives	3
AT 225	Automotive Engine Rebuilding	3
IT/WELD 108	Technical Mathematics	3

Electives (Select 4 units)

AB 50	Auto Body Repair I	3
AT 100	Auto Maintenance and Minor Repair	3
AT 115 and	Automotive Fuel Injection and Fuel Systems	3
AT 115L	Automotive Fuel Systems Computer Training Lab	1
AT 165	Automotive Air Conditioning	2
AT 170	Auto Repair Shop Experience	2
WELD 100	Welding I	3
CE 100	Cooperative Education	2, 3, 4
TOTAL UNITS		**29**

BASIC MUSIC SKILLS (CP)

The primary purpose of this certificate is to provide basic music skills and music fluency. The knowledge gained may be particularly valuable to pre-school or elementary school teachers, music therapists, recreational therapists, multimedia specialists, video game designers, or other creative artists who use music to complement their primary art form.

CERTIFICATE OF PROFICIENCY

Program Requirements		Units
MUS 100	Music Appreciation	3
MUS 103	Fundamentals of Music	3
MUS 115	Basic Keyboard I	.5
MUS 117	Basic Keyboard II	.5
MUS 130	Fundamental Vocal Skills	.5
MUS 175	Beginning Guitar	.5
MUS 180	Computer Music I	3

Electives (Select a minimum of 4.5 units)

MUS 101	Survey of 20th Century Music	3
MUS 102	Introduction to Jazz	3
MUS 131	Vocal Literature and Performance	.5
MUS/DNCE 138	Cuban and Brazilian Drumming II	.5 - 1
MUS 148	Palomar Chorale	1
MUS 149	Spectrum Pop/Jazz Singers	1
MUS 150	Musical Theatre - Vocal	.5 - 1
MUS 151	Concert Band	1
MUS 152	Jazz Ensemble	1
MUS 155	Chamber Ensemble - Brass	1
MUS 157	Guitar Ensembles	1
MUS 158	Chamber Singers	.5 - 1
MUS 161	Summer Concert Band	.5
MUS 169	History of Rock Music	3
MUS 171	World Music	3
MUS 172	Repertory Jazz Ensemble	1
MUS 176	Intermediate Guitar	.5
MUS 179	Beginning Flamenco Guitar	.5
MUS 184	Electronic Ensemble	1
MUS 187	Computer Music Composition	1
MUS 198	Palomar Symphony Orchestra	.5 - 1
MUS 224	Introduction to Jazz Piano	.5
TOTAL UNITS		**15.5**

BASIC POLICE ACADEMY (CA)

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 93	Basic Police Academy Module III	8
AJ 94A	Basic Police Academy Module IIA	7
AJ 94B	Basic Police Academy Module IIB	7
AJ 95A	Basic Police Academy Module IA	8.5
AJ 95B	Basic Police Academy Module IB	13
TOTAL UNITS		**43.5**

BIOLOGY (AS-T)

AS-T TRANSFER MAJOR

The Associate in Science in Biology for Transfer provides students with a comprehensive study of the biological sciences as well as the supporting core to understand the dynamics of biology. The Associate in Science in Biology for Transfer is designed to prepare students for a seamless transfer into the CSU system to complete a baccalaureate degree in the major of Biology. Students completing the major will have a fundamental understanding of concepts and processes in molecular, cellular and organismal biology as well as ecology and evolution. In addition, students will have a solid foundation in math, physics and chemistry.

Pursuant to SB1440, the following completion requirements must be met:

(1) Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:

(A) The Associate in Science in Biology for Transfer degree requires completion of the major and the CSU General Education for STEM or the IGETC for STEM, allowing completion of 6 units of non-stem GE work after transfer. Please see a counselor for details.

(2) Obtainment of a minimum grade point average of 2.0.

ADTs also require that students must earn a C or better in all courses required for the major or area of emphasis. A "P" (Pass) grade is also an acceptable grade for courses in the major if the course is taken on a Pass/No Pass basis.

Required Core (8-12 units)

BIOL 200	Foundations of Biology I	5
BIOL 201	Foundations of Biology II	5

List A (21-22 units)

CHEM 110	General Chemistry	3
CHEM 110L	General Chemistry Laboratory	2
CHEM 115	General Chemistry	3
CHEM 115L	General Chemistry Laboratory	2
MATH 140	Calculus with Analytic Geometry, First Course	5
PHYS 120	General Physics and	4
PHYS 121	General Physics or	4
PHYS 200	Fundamentals of Physics and	5
PHYS 201	Fundamentals of Physics or	5
PHYS 230	Principles of Physics and	5
PHYS 231	Principles of Physics	5
TOTAL UNITS		**33 - 35**

BIOLOGY-PREPROFESSIONAL (AS, CA)

Provides intensive lower-division preparation for pursuing advanced studies in biological science, pre-medical, pre-dental, or pre-veterinarian 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.S. 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	General Chemistry	3
CHEM 110L	General Chemistry Laboratory	2
CHEM 115	General Chemistry	3
CHEM 115L	General Chemistry Laboratory	2
MATH 140	Calculus/Analytic Geometry, First Course	5
MATH 141	Calculus/Analytic Geometry, Second Course	4
TOTAL UNITS		**29**

Courses in the program are based upon recommendations given to pre-med students at UC Berkeley. Actual requirements will vary from school to school and will depend on specific student goals. Students must check with the professional schools (not transfer schools) to which they plan to apply for their specific requirements. Choice of courses will also depend upon the student's major. Humanities majors, for example, can spread out pre-med coursework into their junior and senior years.

Recommended Electives: BIOL 211; CHEM 220,221; MATH 205; PHYS 230, 231, 232

BOOKKEEPING/ACCOUNTING CLERK (CP)

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

CERTIFICATE OF PROFICIENCY

Program Requirements		Units
ACCT 101	Bookkeeping	3
	or	
ACCT 201	Financial Accounting	4
ACCT 104	Accounting Spreadsheet Concepts	2
ACCT 110	Quickbooks	2
ACCT 115	Sales Tax, Payroll Taxes, and Employee Benefits	2
TOTAL UNITS		**9 - 10**

BROADCAST JOURNALISM (CP)

Provides a background in print journalism and broadcast journalism: practical experience in gathering, writing, editing and producing news. This certificate prepares students for employment in the television news industry.

CERTIFICATE OF PROFICIENCY

Program Requirements		Units
JOUR 101	Multimedia Writing and Reporting	3
JOUR 105	Multimedia News Writing and Production	3
DBA/ENTT 120	Digital Television Production	3
DBA 240B	Beginning Television News/Sports	3
DBA 240D	Advanced Television News/Sports	3
TOTAL UNITS		**15**

BUSINESS ADMINISTRATION (AS-T)

The Associate in Science in Business Administration for Transfer degree provides students the basic functions of business including accounting, economics, business ethics, business related soft-ware applications, business communications and business statistical study. The degree prepares students for entry into an extraordinary number of academic studies such as: accounting, finance, marketing, business administration, advertising, merchandizing, banking, economics, entrepreneurial studies, health care management, hospitality management, international business, and public relations. It can also provide skills necessary for entry-level positions in the field of business.

To obtain the Associate in Science in Business Administration for Transfer, students must complete the following:

Maximum of 60 CSU-transferable units with a minimum grade point average (GPA) of 2.0. and a grade of "C" or better in all courses required for the major: A "P" (Pass) grade is also an acceptable grade for courses in the major if the course is taken on a Pass/No Pass basis.

• a minimum of 18 semester units in the major as determined by the community college district, and:
one of the following general education patterns:

• the California State University General Education-Breadth (CSU GE-Breadth) pattern of 39 units; OR:

• the Intersegmental General Education Transfer Curriculum (IGETC) pattern of 37 units

AS-T TRANSFER MAJOR

Program Requirements		
*ACCT 201	Financial Accounting	4
*ACCT 202	Managerial Accounting	4
*ECON 101	Principles of Economics (Macro)	3
*ECON 102	Principles of Economics (Micro)	3
*BUS 117	Legal Environment of Business	3

List A: Select one of the following:

*MATH 130	Calculus for Business and the Social Sciences	4
MATH 120	Elementary Statistics	4
PSYC/SOC 205	Statistics for the Behavioral Sciences	4
*BUS 204	Quantitative Business Analysis	4

List B: Select two of the following or any course from List A not already chosen:

BUS 104	Business Information Systems	3
	or	
CSIT 105	Computer Concepts and Applications	3
	or	
CSIT 125	Computer Information Systems	3
BUS 100	Introduction to Business	3
	or	
*BUS 205	Business Communication	3
TOTAL UNITS		**27**

*Course is required major preparation at CSU San Marcos (CSUSM). Students planning to transfer to CSUSM are advised to select these courses to complete this degree. For more information on this major at CSUSM, please refer to the articulation agreement at ASSIST.ORG.

BUSINESS GENERAL (AS)

The General Business degree provides a solid overview of business fundamentals and can prepare students for entry-level work in various industries. Students choose an emphasis area allowing them to tailor this degree to their individual interests. Once completed, students will have the problem solving, communication, and creative skills needed to thrive in the business world.

A.S. DEGREE MAJOR

Program Requirements		Units
BUS 100	Introduction to Business	3
ACCT 101	Bookkeeping	3
	or	
ACCT 201	Financial Accounting	4
BUS 125	Business English	3
	or	
BUS 205	Business Communication	3
CSIT 105	Computer Concepts and Applications	3
BUS 110	Business Mathematics	3
BUS 117	Legal Environment of Business	3
BUS 173	Contemporary Job Search Techniques	1

Choose An Emphasis Area:
Advertising, Marketing, and Media Emphasis

BUS 155	Marketing	3
BUS 152	Social Media for Business	3
BUS 150	Advertising	3
BUS 157	E-Commerce	3
	or	
BUS 145	Retailing/Promotion	3

Business Management Emphasis

BMGT 101	Introduction to Management	3
BUS 138	Business Ethics	2
BUS 175	Excel Basic	1
	or	
BUS 176	Excel Intermediate	1
	or	
BUS 177	Excel Advanced	1
BMGT 115	Organizational Theory and Design	3
BMGT 130	Management/Leadership Issues	3

International Business Emphasis

IBUS 100	Introduction to International Business and Management	3
BUS 130	Principles of Supply Chain Management	3
BUS 129	Principles of Logistics	3
IBUS 120	Essentials of Import/Export Procedures	3

Small Business Entrepreneurship Emphasis

BMGT 153	Small Business Entrepreneurship	3
BUS 152	Social Media for Business	3
	or	
BUS 155	Marketing	3
ACCT 110	Quickbooks	2
CE 100	Cooperative Education	.5 – 4
TOTAL UNITS		**27.5 - 32**

* Not required if acceptable level skill has been completed in high school. Students excused from BUS 165 must substitute an elective.

Recommended Electives: BUS 170, 171; ECON 101; PSYCH 100

BUSINESS INFORMATION WORKER (CA)

CERTIFICATE OF ACHIEVEMENT

The Business Information Worker Certificate of Achievement is a new certificate that is based directly on industry advisors' recommendations for required job skills; it is designed to prepare students for entry-level office administrative support in a variety of fields or businesses. This certificate will upgrade existing job skills and will lead to preparation for immediate employment in entry-level positions in various fields as well as augment employer-required skills for any career/degree.

Program Requirements		Units
BUS 104	Business Information Systems	3
	or	
CSIT 125	Computer Information Systems	3
BUS 142	Customer Service	1
BUS 165	Beginning Keyboarding	2
BUS 170	Word for Business - Basic	1
BUS 175	Excel Basic	1
BUS 189	Beyond Outlook Essentials	1
BUS 205	Business Communication	3
TOTAL UNITS		**12**

BUSINESS MANAGEMENT (AS, CA)

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.S. DEGREE MAJOR OR
CERTIFICATE OF ACHIEVEMENT

Program Requirements		Units
ACCT 201	Financial Accounting	4
ACCT 104	Accounting Spreadsheet Concepts	2
BMGT 101	Introduction to Management	3
BMGT 115	Organizational Theory and design	3
BMGT 130	Management/Leadership Issues	3
BUS 110	Business Mathematics	3
BUS 115	Business Law	
	or	
BUS 117	Legal Environment of Business	3
BUS 138	Business Ethics	2
BUS 155	Marketing	3
BUS 205	Business Communication	3

Elective Courses (Select 3-4 units)

ACCT 202	Managerial Accounting	4
BMGT 110	Human Resource Management	3
BMGT 125	Introduction to Labor Relations	3
BMGT 295	Directed Study in Business Management	1 - 3
BUS 130	Principles of Supply Chain Management	3
BUS 145/		
FASH 125	Retailing/Promotion	3
BUS 157	E-Commerce	3
BUS 170	Word for Business – Basic	1
BUS 180	Access Basic	1
BUS 185	PowerPoint for Business	1
ECON 100	Basic Economics	3
TOTAL UNITS		**32 - 33**

CABINETMAKING AND MILLWORK (AS, CA)

This program will prepare students to make a living at cabinetmaking. It provides the student with the theory and skills needed for employment and/or self employment in the field of cabinetmaking and millwork. Program begins with the basic safe use of tools and machines and basic woodworking processes. Specific and practical skills and knowledge of the cabinetmaking and millwork industries are covered with required and elected coursework.

A.S. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT

Program Requirements		Units
CFT 100	Fundamentals of Woodworking	4
CFT 105	Machine Woodworking/Furniture	4
CFT 108	Business Woodworking	2
CFT 165A	Cabinetry Design/Face Frame	4
	and	
CFT 167A	Cabinetry Production/Face Frame	4
	or	
CFT 165B	Cabinetry Design/European	4
	and	
CFT 167B	Cabinetry Production/European	4
CFT 168	Cabinetmaking/Architectural Millwork	2
CFT 185	Machine Tool Set-Up and Maintenance	2
CFT 195	Finishing Technology/Touch-Up and Repair	2

Electives (Select one course)		
CFT 163	Plastic Laminate Fabrication Techniques	1
CFT 169	Cabinetmaking/Computer Cabinet Layout	2
TOTAL UNITS		**25 - 26**

CAD/CAM DESIGN AND MANUFACTURING (AS)

Provides students with the knowledge and hands-on learning of 2D and 3D modeling using a variety of computer aided drafting software packages, machine programming and set up, and the operation of a variety of computer-controlled machines to produce precision manufactured parts.

Emphasis is placed on safety, machine programming, manufacturing techniques, and precision measuring to insure accuracy and exactness of machined parts to dimensional tolerances from engineering drawings.

A.S. DEGREE MAJOR

Required Courses		Units
DT/ENGR 101	AutoCAD Introduction to Computer Aided Drafting	3
DT/ENGR 103	SolidWorks Introduction to 3D Design and Presentation	3
DT/ENGR 104	SolidWorks Advanced 3D Design and Presentation	3
IT 120	Blueprint Reading for Machinists	3
	or	
DT/ENGR 110	Technical Drafting I with AutoCAD	3
DT/ENGR/ WELD 117	Blueprint Reading and Geometric Dimensioning and Tolerance	3
WELD 190	CNC Machining MasterCam I	3
MACH 191	CNC Machining MasterCam II	3
IT 192	Manufacturing III Multi-Axis Programming and Machining	3
IT 115	Industrial Safety	2
MATH 110	College Algebra	4
	or	
MATH 115	Trigonometry	3
TOTAL UNITS:		**29 - 30**

CARPENTRY (AS, CA)

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.S. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT

Program Requirements		Units
AP C 701	Orientation	1.5
AP C 702	Safety and Health Certification	1.5
AP WE 711	Carpentry Work Experience	4

Electives (Select 14 courses)		
AP C 703	Printreading	1.5
AP C 704	Advanced Printreading	1.5
AP C 705	Foundation and Flatwork	1.5
AP C 707	Tilt-Up Panel Construction	1.5
AP C 708	Wall Forming	1.5
AP C 709	Gang Forms/Columns	1.5
AP C 710	Patented Forming Systems	1.5
AP C 712	Column Forms	1.5
AP C 713	Beam and Deck Forming	1.5
AP C 714	Basic Commercial Framing	1.5
AP C 716	Commercial Floor Framing	1.5
AP C 717	Basic Stairs	1.5
AP C 718	Advanced Stairs	1.5
AP C 719	Exterior Finish Details	1.5
AP C 721	Basic Roof Framing	1.5
AP C 723	Basic Metal Framing	1.5
AP C 725	Transit Level/Laser	1.5
AP C 726	Bridge Construction	1.5
AP C 727	Stair and Ramp Forming	1.5
AP C 728	Stair Trim	1.5
AP C 729	Cabinet Millwork and Assembly	1.5
AP C 730	Cabinet Installation	1.5
AP C 735	Molding and Trim	1.5
AP C 736	Plastic Laminates	1.5
AP C 737	Door and Door Frames	1.5
AP C/ AP DL 739	Door and Door Hardware	1.5
AP C 745	Commercial Fixtures	1.5
AP C 747	Basic Suspended Scaffold	1.5
AP C 748	Advanced Suspended Scaffold	1.5
AP C 749	Basic Systems Scaffold	1.5
AP C 750	Intermediate Systems Scaffold	1.5
AP C 751	Advanced Systems Scaffold	1.5
AP C 752	Basic Frame Scaffold	1.5
AP C 753	Intermediate Frame Scaffold	1.5
AP C 754	Advanced Frame Scaffold	1.5
AP C 755	Basic Tube and Clamp Scaffold	1.5
AP C 756	Scaffold in Confined Spaces	1.5
AP C 757	Specialty Scaffold Applications	1.5
AP C 758	Scaffold Reshoring	1.5
AP C 761	Basic Wall Framing	1.5
AP C 764	Abutments	1.5
AP C 770	Green Building and Weatherization	1.5
AP C 771	Intermediate Commercial Framing	1.5
AP C 772	Solar Installer Level 1	1.5
AP C 773	Water Treatment Facilities	1.5
AP C/AP AC/AP DL/ AP PL 774	Tool & Equipment Applications	1.5
AP C 765	Rigging	1.5
AP C 775	Store Front Installations	1.5
AP C 776	Total Station I	1.5
AP C 777	Welding Fabrication	1.5
AP C 778	Solid & Stone Surfaces	1.5
AP C 779	Exit & Electrical Security Devices	1.5

AP C 780	Fitting Rooms/Partitions	1.5
AP C 781	Industrial Scaffolding	1.5
AP C 782	Bridge Falsework	1.5
AP C/AP PL 783	Crew Lead Training	1.5
AP C 797	Carpentry Topics	1.5
TOTAL UNITS		**28**

CASE FURNITURE CONSTRUCTION/ MANUFACTURING (AS, CA)

This program will prepare students to make a living manufacturing case furniture. The emphasis will be on utilizing construction processes and building skills to fabricate solid wood furniture with doors and drawers. By studying historic period furniture pieces students will apply traditional methods of construction to modern and contemporary designs while also developing production methods to increase efficiency and profit. Students will learn to work with clients to design and construct either period furniture pieces or custom contemporary pieces.

A.S. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT

Program Requirements

CFT 100	Fundamentals of Woodworking	4
CFT 105	Machine Woodworking/Furniture	4
CFT 108	Business Woodworking	2
CFT 110A	Period Case Furniture Design	4
	and	
CFT 111A	Period Case Furniture Production	4
	or	
CFT 110B	Contemporary Case Furniture Design	4
	and	
CFT 111B	Contemporary Case Furniture Production	4
CFT 118	Furniture Design Development	2
	or	
CFT 153	Studio Furniture Design I	2
CFT 195	Finishing Technology/Touch-Up and Repair	2

Electives (Select 2 units)

CFT 142	The Art and Craft of Planemaking	2
CFT 143	Decorative Box Making	2
CFT 148	Marquetry, Inlay and Veneering	2
CFT 169	Cabinetmaking/Computer Cabinet Layout	2
CFT 170	Workbench Design and Production	2
CFT 175	Jigs/Fixtures and Routers	2
CFT 185	Machine Tool Set-Up and Maintenance	2
TOTAL UNITS		**24**

CHEMISTRY (AS, CA)

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.S. 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		**2**

CHILD AND ADOLESCENT DEVELOPMENT (AA-T)

The Associate in Arts in Child and Adolescent Development for Transfer prepares students to transfer to California State University campuses that offer bachelor's degrees in Child and Adolescent Development. The degree prepares students to demonstrate basic understanding of child development theory and concepts, as well as preparation in lower-division psychology coursework designed to enhance further developmental study. Students who complete the Child and Adolescent Development AA-T degree and choose to take other child development coursework as their electives will also be able to qualify for employment in the field of Early Childhood Education, as well as earn a Child Development Permit issued by the California State Commission on Teacher Credentialing. This degree is separate from the Associate of Science for Transfer in Early Childhood Education, which prepares students to transfer to CSU campuses that offer bachelor's degrees in Child Development and Early Childhood Education. The degree is ideal for students who plan to transfer for further theoretical, psychological, and developmental study in child and adolescent development, offering lower-division major preparation for baccalaureate degrees.

Pursuant to SB1440, the following completion requirements must be met:

(I) Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:
(A) The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education Breadth Requirements.
(B) A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.
(II) Obtainment of a minimum grade point average of 2.0."

ADTs also require that students must earn a C or better in all courses required for the major or area of emphasis. A "P" (Pass) grade is also an acceptable grade for courses in the major if the course is taken on a Pass/No Pass basis.

Required Core

CHDV 100	Child Growth and Development	3
PSYC 100	Introduction to Psychology	3
PSYC /SOC 205	Statistics for the Behavioral Sciences	4

List A

CHDV 115	Child, Family, and Community	3
CHDV 185	Introduction to Curriculum	3
PSYC 230	Research Methods in Psychology	4
TOTAL UNITS		**20**

CHILD DEVELOPMENT: CHILD AND FAMILY SERVICES (AS, CA)

This program includes a selection of courses that provides academic preparation to individuals for a career in working with families in an early childhood environment. The program will give students general knowledge and skills in theory, principles, and techniques for working with young children and families.

A.S. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT

Program Requirements

CHDV 99	Preparation for Child Development Majors	.5
CHDV 100	Child Growth and Development	3
CHDV 102	Working with Parents and Families	3
CHDV 104	Guidance for Young Children	3
CHDV 120	Health, Safety, and Nutrition	3
CHDV 145	Understanding Childhood Stress and Trauma	3
CHDV 205	Internship in Child and Family Services	2
	And	
CHDV 205A	Internship in Child and Family Services Lab	1
CHDV 115	Child, Family, and Community	3
CHDV 172	Teaching in a Diverse Society	3
CHDV 106	Infant and Toddler Care and Curriculum	3
	or	
CHDV 184	ECE Curriculum Experiences: Language, Literacy, Math and Science	3
	or	
CHDV 182	ECE Curriculum Experiences: Art, Music and Movement	3
TOTAL UNITS		**27.5**

CHILD DEVELOPMENT: ADMINISTRATION (AS, CA)

This program includes a selection of courses that provides academic preparation to individuals for a career as a director or site supervisor in an early childhood setting. The program will give students general knowledge and skills in theory, principles, and techniques for working in an administrative position.

Students also have the option to earn an Associate in Science Degree in Child Development by completing 40 units for this Certificate and the General Education courses required by the college.

A.S. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT

Program Requirements		**Units**
CHDV 99	Preparation for Child Development Majors	.5
CHDV 100	Child Growth and Development	3
CHDV 102	Working with Parents and Families	3
CHDV 104	Guidance for Young Children	3
CHDV 105	Observation and Assessment	3
CHDV 105A	Observation, Assessment, and Participation Lab: Preschool	1
	or	
CHDV 105B	Observation, Assessment, and Participation Lab: Infant/Toddler	1
	or	
CHDV 105C	Observation, Assessment, and Participation Lab: Early Inclusion	1
CHDV 115	Child, Family, and Community	3
CHDV 120	Health, Safety, and Nutrition	3
CHDV 150	Administration I: Programs in Early Childhood Education*	3
CHDV 155	Administration II: Personnel and Leadership in Early Childhood Education*	3
CHDV 185	Introduction to Curriculum	3
CHDV 195	Adult Supervision and Mentoring in Early Care and Education	3

CHDV 201	Practicum in Early Childhood Education	4
CHDV 152A	Environmental Rating Scale for Early Childhood Settings	1.5
	or	
CHDV 152B	Environmental Rating Scale for Infant/Toddler Settings	1.5
CHDV 182	ECE Curriculum Experiences: Art, Music and Movement	3
	or	
CHDV 184	ECE Curriculum Experiences: Language, Literacy, Math and Science	3
	or	
CHDV 106	Infant and Toddler Care and Curriculum	3
TOTAL UNITS		**40**

*CHDV 150 and 155 courses are administration courses required for director positions in licensed child care facilities through Community Care Licensing.

CHILD DEVELOPMENT MASTER TEACHER: EARLY INCLUSION

This program includes a selection of courses that provide academic preparation for a teaching career working with typically developing children and children with disabilities (birth to 5 years) in inclusive settings. This program will give students general knowledge and skills in theory, principles, and techniques for work in inclusive settings.

A.S. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT

Program Requirements		**Units**
CHDV 99	Preparation for Child Development Majors	0.5
CHDV 100	Child Growth and Development	3
CHDV 105C	Observation, Assessment, and Participation Lab: Early Inclusion *	1
CHDV 115	Child, Family, and Community	3
CHDV 104	Guidance for Young Children	3
CHDV 110	Introduction to Special Education	3
CHDV 105	Observation and Assessment	3
CHDV 120	Health, Safety, and Nutrition	3
CHDV 152A	Environmental Rating Scale for Early Childhood Settings	1.5
	or	
CHDV 152B	Environmental Rating Scale for Infant/Toddler Settings	1.5
CHDV 185	Introduction to Curriculum	3
CHDV 201	Practicum in Early Childhood Education	4
CHDV 182	ECE Curriculum Experiences: Art, Music and Movement	3
	or	
CHDV 184	ECE Curriculum Experiences: Language, Literacy, Math and Science	3
CHDV 195	Adult Supervision/Mentor Teacher Preparation	3
CHDV 142	Using Sign in the Early Childhood Setting	0.5
CHDV 106	Infant and Toddler Care and Curriculum	3
CHDV 112	Early Intervention and Inclusion	3
CHDV 204	Advanced Practicum in Early Childhood Education: Inclusive Setting	1.5
TOTAL UNITS:		**39**

CHILD DEVELOPMENT MASTER TEACHER: INFANT/TODDLER (AS, CA)

This program includes a selection of courses that provides academic preparation to individuals for a teaching career to work with infants and toddlers (birth to 36 months) in early childhood settings. The program will give students the general knowledge and skills in theory, principles, and techniques for this specialized group of children.

A.S. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT

Program Requirements		Units
CHDV 99	Preparation for Child Development Majors	.5
CHDV 100	Child Growth and Development	3
CHDV 115	Child, Family, and Community	3
CHDV 104	Guidance for Young Children	3
CHDV 106	Infant and Toddler Care and Curriculum	3
CHDV 120	Health, Safety, and Nutrition	3
CHDV 105	Observation and Assessment and	3
CHDV 105B	Observation, Assessment, and Participation Lab: Infant/Toddler *	1
CHDV 152B	Environmental Rating Scale for Infant/Toddler Settings	1.5
CHDV 103	Infant and Toddler Development	3
CHDV 142	Using Sign in the Early Childhood Setting	.5
CHDV 185	Introduction to Curriculum	3
CHDV 195	Adult Supervision/Mentor Teacher Preparation	3
CHDV 201	Practicum in Early Childhood Education	4
CHDV 182	ECE Curriculum Experiences: Art, Music and Movement or	3
CHDV 184	ECE Curriculum Experiences: Language, Literacy, Math and Science	3
CHDV 203	Advanced Practicum in Early Childhood Education: Infant/Toddler	1.5
TOTAL UNITS		**39**

*CHDV 203 should be taken in the last semester for this certificate or A.S. degree major program. Students must have completed, or be concurrently enrolled in all necessary classes required for this certificate during the semester they are enrolled in CHDV 203.

CHILD DEVELOPMENT: SCHOOL AGE ASSISTANT (CA)

This program includes a selection of courses that provides academic preparation to individuals for a career working with school age children in before and after school and enrichment programs. The program will give students general knowledge and skills in theory, principles, and techniques for working with school age children in an entry level position.

CERTIFICATE OF ACHIEVEMENT

Program Requirements		Units
CHDV 99	Preparation for Child Development Majors	.5
CHDV 100	Child Growth and Development	3
CHDV 104	Guidance for Young Children	3
CHDV 115	Child, Family, and Community	3
CHDV 180	School-Age Development	3
CHDV 190	Curriculum for the School-Aged Child	3
TOTAL UNITS		**15.5**

CHILD DEVELOPMENT TEACHER (AS, CA)

This program includes a selection of courses that provides academic preparation to individuals for a career as a preschool teacher in an early childhood setting. The program will give students general knowledge and skills in theory, principles, and techniques for working with young children.

A.S. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT

Program Requirements		Units
CHDV 99	Preparation for Child Development Majors	.5
CHDV 100	Child Growth and Development	3
CHDV 115	Child, Family, and Community	3
CHDV 104	Guidance for Young Children	3
CHDV 105	Observation and Assessment and	3
CHDV 182	ECE Curriculum Experiences: Art, Music and Movement or	3
CHDV 184	ECE Curriculum Experiences: Language, Literacy, Math and Science or	3
CHDV 106	Infant and Toddler Care and Curriculum or	3
CHDV 105A	Observation, Assessment, and Participation Lab: Preschool *	1
CHDV 120	Health, Safety, and Nutrition	3
CHDV 152A	Environmental Rating Scale for Early Childhood Settings or	1.5
CHDV 152B	Environmental Rating Scale for Infant/Toddler Settings	1.5
CHDV 185	Introduction to Curriculum	3
CHDV 201	Practicum in Early Childhood Education	4
TOTAL UNITS		**28**

CHDV 105A and 202 placement for observation and supervised field experience must be in a classroom with preschool age children.

CINEMA (AA, CA)

Provides the theory and practice necessary for work in the field of filmmaking.

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
DBA/CINE 125	Beginning Single Camera Film and Video Production	3
CINE/DBA 225	Intermediate Film and Video Field Production	3
Electives (Select 6 units)		
CINE 110	Documentary Film	3
CINE/DBA 115	Creative Writing for TV/Cinema	3
CINE 122	Identity in American Film	3
DBA 110	Broadcast and Media Writing	3
TOTAL UNITS		**27**

COMMERCIAL PHOTOGRAPHY (CP)

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 130	Digital Darkroom I	3
PHOT/JOUR 140	Photojournalism	3
PHOT 220	Commercial Photography	3
PHOT 225	Photographic Portraiture	3
PHOT 209	Photographic Portfolio	3
TOTAL UNITS		**15**

COMMUNICATION STUDIES (AA-T)

The Associate in Arts in Communication Studies for Transfer degree is designed to prepare students for a seamless transfer into the CSU system to complete a baccalaureate degree in Communication Studies. The Communication Studies AA-T degree encourages students to examine and evaluate human communication across and within various contexts for the purpose of increasing competence. The Communication Studies AA-T degree is beneficial for students seeking a baccalaureate degree ultimately leading to careers in business, teaching, law, counseling, healthcare, broadcasting, advertising, journalism and performing arts.

Pursuant to SB1440, the following Associate Degree for Transfer completion requirements must be met:

(1) Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:

(A) The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements.

(B) A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.

(2) Obtainment of a minimum grade point average of 2.0.

ADTs also require that students must earn a C or better in all courses required for the major or area of emphasis. A "P" (Pass) grade is also an acceptable grade for courses in the major if the course is taken on a Pass/No Pass basis.

AA-T TRANSFER MAJOR

Required Courses		
SPCH 100	Oral Communication	3

List A: Select Two (6 units)		
*SPCH 105	Beginning Argumentation and Debate	3
SPCH 115	Interpersonal Communication	3

List B: Select Two (6 units)		
SPCH 290	Competitive Intercollegiate Forensics	3
SPCH 131	Intercultural Communication	3
*SPCH 120	Human Communication	3
COMM 100	Introduction to Mass Communication	3
SPCH/TA 125	Beginning Oral Interpretation	3
*SOC/PSYC 205	Statistics for the Behavioral Sciences	4
JOUR 105	Multimedia News Writing and Production	3
JOUR 130	Blogging	3
JOUR/PHOT 140	Photojournalism	3

List C: Select One (3 units)		
ANTH 105	Introduction to Cultural Anthropology	3
PSYC 100	Introduction to Psychology	3
SOC 100	Introduction to Sociology	3
ENG 205	Introduction to Literature	3
	or	
ENG 202	Critical Thinking and Composition	4
JOUR 101	Multimedia Writing and Reporting	3
COMM 105	Race, Gender and Media Effects	3
TOTAL UNITS		**18 - 20**

*Course is required major preparation at CSU San Marcos (CSUSM). Students planning to transfer to CSUSM are advised to select these courses to complete this degree. For more information on this major at CSUSM, please refer to the articulation agreement at ASSIST.ORG.

CIS: DATA ANALYTICS (AS, CA)

Computer Information Systems (CIS): Data Analytics is a series of courses that bind both technology and business to produce quality information for an organization. CIS:Data Analytics emphasizes the technology skills to implement analytic solutions to enable educated decisions derived from data analysis of large data sets. Typical employment opportunities include data analyst, computer support specialist, user support specialist, database administrators, software testers and application development.

Key areas of focus in this degree are: Computer Information Systems; BI and Data Analytics, Computer Programming; System Development; Database Management; Social Media.

Students planning to focus on technology and computing in Information Systems are recommended to earn an A.S. in CIS: Data Analytics. This degree is ideal for students eager to break into the field of computing by earning a career technical certificate or degree while completing transferable coursework.

A.S. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT

Program Requirements		
CSIT 125	Computer Information Systems	3
CSIT 150	Introduction to SQL	3
CSIT 225	Introduction to Data Analytics	3
CSIT 226	Data Visualization	3
CSIT 230	Data Modeling	3
MATH 120	Elementary Statistics	4

Group One (Choose 1)		
CSIT 145	Introduction to Programming Using Java	3
CSIT 175	Python Programming	3
CSIT 180	180 C# Programming I	3
CSCI 112	Programming Fundamentals I	4

Group Two (Choose 1)		
CSWB 110	Web Site Development with HTML5/CSS3	3
JOUR 200	Mastering Social Media	3
BUS 152	Social Media for Business	3
CSIT 165	R Programming	3
TOTAL UNITS		**25 - 26**

COMPUTER NETWORK ADMINISTRATION WITH EMPHASIS: CISCO (AS, CA)

This program prepares the student for employment in the field of Computer Networking. The focus is on developing skills in a combination of the fundamental and basic network technologies produced by Cisco. 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.

A.S. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT

Program Requirements		Units
CSNT 110	Hardware and O.S. Fundamentals	4
CSNT 111	Networking Fundamentals	3
CSNT 160	Cisco Networking Fundamentals	3
CSNT 161*	Cisco Router Configuration	3
CSNT 260	Cisco Advanced Routing and Switching	3
CSNT 261	Cisco Wide Area Network Design and Support	3
CSNT 180	Wireless Networking	3
CSNT 181	Hacker Prevention/Security	3
CSNT 280	Computer Forensics Fundamentals	3
TOTAL UNITS		**28**

* Note: CSNT 160 is a prerequisite for CSNT 161

COMPUTER NETWORK ADMINISTRATION WITH EMPHASIS: LINUX (AS, CA)

This program prepares the student for employment in the field of Computer Networking with an emphasis on the Linux Operating System. The focus is on developing skills in a combination of the network technologies produced by Linux/Unix. Specific learning outcomes include developing team dynamics in the following skills: Linux Operating System, Linux Administration and Security, Linux Scripting, 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. Linux will be the primary operating system learned.

A.S. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT

Program Requirements		Units
CSNT 110	Hardware and O.S. Fundamentals	4
CSNT 111	Networking Fundamentals	3
CSCI 130	Linux Fundamentals	3
CSNT 140	Linux Administration	3
CSNT 141	Linux Networking and Security	3
CSNT 180	Wireless Networking	3
CSNT 181	Hacker Prevention/Security	3
CSNT 280	Computer Forensics Fundamentals	3
TOTAL		**25**

COMPUTER NETWORK ADMINISTRATION WITH EMPHASIS: MICROSOFT (AS, CA)

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 technologies produced by Microsoft. 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, Active Directory, Network Infrastructure, Exchange Server, Routing Principles and Configuration, and Maintaining a Corporate Network. Students will be prepared to take specific industry certification exams related to Microsoft, CompTia, and Security.

A.S. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT

Program Requirements		Units
CSNT 110	Hardware and O.S. Fundamentals	4
CSNT 111	Networking Fundamentals	3
CSNT 120	Windows Client and Microsoft Office Deployment	3
CSNT 121	Windows Server	3
CSNT 122	Windows Systems Administration	3
CSNT 124	Implementing a Microsoft Desktop Application Environment	3
CSNT 180	Wireless Networking	3
CSNT 181	Hacker Prevention/Security	3
CSNT 280	Computer Forensics Fundamentals	3
TOTAL UNITS		**28**

COMPUTER SCIENCE (AS, CA)

Computer Science is the study and design of computer systems: both hardware and software. Computer scientists are primarily concerned with the design of algorithms, languages, hardware architectures, systems software, applications software and tools. Emphasis in the Computer Science program is placed on the ability to solve problems and think independently. The program offers a foundation in data structures, computer architecture, software design, algorithms, programming languages, and object-oriented programming. See a Counselor for additional university transfer requirements in this major.

A.S. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT

Program Requirements		
CSCI 112	Programming Fundamentals I	4
CSCI 114	Programming Fundamentals II	4
CSCI 210	Data Structures	4
CSCI 212	Machine Organization and Assembly Language	4
CSCI 222	C++ and Object-Oriented Programming	4

Electives (Select 2 courses)		
CSCI 130	Linux Fundamentals	3
CSCI 230	Java GUI Programming	3
CSCI 235	Android Development	3
CSCI 260	Video Game Programming I	3
CSCI 275	iOS Development	3
MATH 245	Discrete Mathematics	3
CSCI 250	Introduction to Artificial Intelligence	4
TOTAL UNITS		**26 - 27**

COMPUTER SCIENCE WITH EMPHASIS IN VIDEO GAMING (AS, CA)

Computer Science is the study and design of computer systems: both hardware and software. Computer scientists are primarily concerned with the design of algorithms, languages, hardware architectures, systems software, applications software and tools. Emphasis in the Computer Science program is placed on the ability to solve problems and think independently. The program offers a foundation in data structures, computer architecture, software design, algorithms, programming languages, and object-oriented programming. This program also introduces students to the video game industry, video game design and programming. See a Counselor for additional university transfer requirements in this major.

A.S. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT

Program Requirements

CSCI 112	Programming Fundamentals I	4
CSCI 114	Programming Fundamentals II	4
CSCI 160	Overview of the Video Game Industry	4
CSCI 161	Video Game Design	4
CSCI 210	Data Structures	4
CSCI 212	Machine Organization and Assembly Language	4
CSCI 222	C++ and Object-Oriented Programming	4
CSCI 260	Video Game Programming I	3
TOTAL UNITS		**31**

CREATING YOUR BUSINESS IN A GIG ECONOMY (CP)

CERTIFICATE OF PROFICIENCY

This unique three course certificate combines a comprehensive course in small business entrepreneurship to launch a business; a course in social media to advertise and market the business; and a cooperative education course where the student will be mentored on the creation of a new business or improvement of an existing business, via a business coach.

Program Requirements:

BMGT 153	Small Business Entrepreneurship	3
BUS 152	Social Media for Business	3
CE 100	Cooperative Education	1 - 4
TOTAL UNITS		**7 - 10**

CYBERSECURITY (AS)

This program prepares students for a career in cybersecurity as a Cybersecurity Analyst. The program emphasizes competency in computer, network and application security for ensuring the security, confidentiality, integrity and availability of enterprise computing and information systems infrastructure. Students will develop skills in risk and vulnerability management as well as learn competencies in cyber defense and penetration testing strategies.

A.S. DEGREE MAJOR

Program Requirements

CSNT 110	Hardware and O.S. Fundamentals	4
CSNT 111	Networking Fundamentals	3
CSIT 125	Computer Information Systems	3
CSCI 130	Linux Fundamentals	3
CSIT 175	Python Programming	3
CSNT 181	Hacker Prevention/Security	3
CSNT 250	Cyber Defense and Analysis	3
CSNT 255	Ethical Hacking Principles	3
CSNT 280	Computer Forensics Fundamentals	3
TOTAL UNITS		**28**

DANCE - EMPHASIS IN EURO-WESTERN DANCE (AA, CA)

The Euro-Western Dance Program prepares the student for employment in the field of dance and dance-related professions. Both the degree and the certificate are designed as career/technical programs which provide students with the basic skills necessary for involvement in community dance activities, such as teaching in recreation centers, community centers and private studios; or performing or choreographing for community events. This degree and certificate also prepares dancers for the entertainment industry such as theme parks (Disney, Knotts Berry Farm, Legoland, Seaworld, Wild Animal Park), the music industry, as back-up dancers for musical artists, and a range of professional theatrical dance opportunities. 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

DNCE 102	The Hollywood Musical: Dance on Film	3
DNCE 145	Choreography I	3
DNCE 165	Production Management	2 - 2.5
DNCE 280	Student Choreography Production I	1.5 - 2
DNCE 161	Teaching Methods in Dance	3
DNCE 225	Contemporary Dance Ensemble I	1
DNCE 115	Ballet I	1
	or	
DNCE 210	Ballet III	1
DNCE 120	Jazz Technique I	1
	or	
DNCE 215	Jazz Technique III	1
DNCE 130	Tap I	1
	or	
DNCE 230	Tap III	1

Group I Electives - Ballet/Pointe (Select one course)

DNCE 116	Ballet II	1
DNCE 211	Ballet IV	1
DNCE 117	Pointe I	1
DNCE 118	Pointe II	1
DNCE 217	Pointe III	1
DNCE 218	Pointe IV	1

Group II Electives - Modern (Select one course)

DNCE 110	Modern Dance I	1
DNCE 111	Modern Dance II	1
DNCE 205	Modern Dance III	1
DNCE 206	Modern Dance IV	1

Group III Electives - Jazz or Tap (Select one course)

DNCE 131	Tap II	1
DNCE 231	Tap IV	1
DNCE 121	Jazz Technique II	1
DNCE 216	Jazz Technique IV	1

Group IV Electives - Production and Ensemble (Select two courses)

DNCE 270	Contemporary Ballet Production I	1
DNCE 272	Contemporary Ballet Production II	1
DNCE 271	Classical Ballet Production I	1
DNCE 282	Classical Ballet Production II	1
DNCE 274	Contemporary Modern Dance Production I	1
DNCE 276	Contemporary Modern Dance Production II	1
DNCE 277	Classical Jazz Production I	1
DNCE 287	Classical Jazz Production II	1
DNCE 278	Modern Jazz Production I	1
DNCE 288	Modern Jazz Production II	1
DNCE 279	Tap Production I	1
DNCE 289	Tap Production II	1
DNCE 273	Modern Dance Production I	1

Group V Electives (Select one course)

DNCE 101	Survey of World Dance	3
DNCE 105	Introduction to Dance History	3
DNCE 155	Hip Hop I	1
DNCE 158	Hawaiian and Tahitian Dance I	.5 - 1
DNCE 190	World Dance Production I	1
DNCE 149	Afro-Cuban/Brazilian Dance I	1
DNCE/MUS 137	Cuban and Brazilian Drumming I	.5 - 1
DNCE 151	Latin Social Dance I	1
DNCE 153	Capoeira: Afro/Brazilian Martial Arts I	.5 - 1
TOTAL UNITS		**22 - 26.5**

DANCE - EMPHASIS IN GENERAL DANCE (AA, CA)

The General Dance Program prepares the student for employment in the field of dance and dance-related professions. Both the degree and the certificate are designed as career/technical programs which provide students with the basic skills necessary for involvement in community dance activities, such as teaching in recreation centers, community centers and private studios; or performing or choreographing for community events. This degree and certificate also prepares dancers for the entertainment industry such as theme parks (Disney, Knotts Berry Farm, Legoland, Seaworld, Wild Animal Park), the music industry, as back-up dancers for musical artists, and a range of professional theatrical dance opportunities. 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

DNCE 101	Survey of World Dance	3
DNCE 105	Introduction to Dance History	3
DNCE 145	Choreography I	3
DNCE 161	Teaching Methods in Dance	3
DNCE 165	Production Management	2 - 2.5
DNCE 280	Student Choreography Production I	1.5 - 2
DNCE 115	Ballet I	1
	or	
DNCE 210	Ballet III	1
DNCE 149	Afro-Cuban/Brazilian Dance I	1
DNCE 151	Latin Social Dance I	1
DNCE 190	World Dance Production I	1
DNCE 225	Contemporary Dance Ensemble I	1

Group I Electives - Ballet/Pointe (Select one course)

DNCE 116	Ballet II	1
DNCE 211	Ballet IV	1
DNCE 117	Pointe I	1
DNCE 118	Pointe II	1
DNCE 217	Pointe III	1
DNCE 218	Pointe IV	1

Group II Electives - Afro-Cuban/Brazilian or Latin Social (Select one course)

DNCE 150	Afro-Cuban/Brazilian Dance II	1
DNCE 249	Afro-Cuban/Brazilian Dance III	1
DNCE 250	Afro-Cuban/Brazilian Dance IV	1
DNCE 152	Latin Social Dance II	1
DNCE 251	Latin Social Dance III	1
DNCE 252	Latin Social Dance IV	1

Group III Electives - Jazz or Tap (Select one course)

DNCE 120	Jazz Technique I	1
DNCE 121	Jazz Technique II	1
DNCE 215	Jazz Technique III	1
DNCE 216	Jazz Technique IV	1
DNCE 130	Tap I	1
DNCE 131	Tap II	1
DNCE 230	Tap III	1
DNCE 231	Tap IV	1

Group IV Electives - Hawaiian and Tahitian or Capoeira (Select one course)

DNCE 158	Hawaiian and Tahitian Dance I	.5 - 1
DNCE 159	Hawaiian and Tahitian Dance II	.5 - 1
DNCE 258	Hawaiian and Tahitian Dance III	.5 - 1
DNCE 259	Hawaiian and Tahitian Dance IV	.5 - 1
DNCE 153	Capoeira: Afro/Brazilian Martial Arts I	.5 - 1
DNCE 154	Capoeira: Afro/Brazilian Martial Arts II	.5 - 1
DNCE 253	Capoeira: Afro/Brazilian Martial Arts III	.5 - 1
DNCE 254	Capoeira: Afro/Brazilian Martial Arts IV	.5 - 1

Group V Electives - General Dance (Select one course)

DNCE 100	Survey of Dance	3
DNCE 102	The Hollywood Musical: Dance on Film	3
DNCE/MUS 137	Cuban and Brazilian Drumming I	.5 - 1
DNCE 155	Hip Hop I	1
DNCE 255	Hip Hop III	1
DNCE/MUS/ TA 173	Musical Theatre Scenes I	1
DNCE 226	Contemporary Dance Ensemble II	1
DNCE 290	World Dance Production II	1
DNCE 148	Drum and Dance Ensemble I	1
DNCE 248	Drum and Dance Ensemble II	1
TOTAL UNITS		**23.5 - 29**

DANCE - EMPHASIS IN WORLD DANCE (AA, CA)

The World Dance Program prepares the student for employment in the field of dance and dance-related professions. Both the degree and the certificate are designed as career/technical programs which provide students with the basic skills necessary for involvement in community dance activities, such as teaching in recreation centers, community centers and private studios; or performing or choreographing for community events. This degree and certificate also prepares dancers for the entertainment industry such as theme parks (Disney, Knotts Berry Farm, Legoland, Seaworld, Wild Animal Park), the music industry, as back-up dancers for musical artists, and a range of professional theatrical dance opportunities. 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

DNCE 101	Survey of World Dance	3
DNCE 149	Afro-Cuban/Brazilian Dance I	1
DNCE 151	Latin Social Dance I	1
DNCE 145	Choreography I	3
DNCE 190	World Dance Production I	1
	or	
DNCE 290	World Dance Production II	1
DNCE 280	Student Choreography Production I	1.5 - 2
DNCE 148	Drum and Dance Ensemble I	1
	or	
DNCE 248	Drum and Dance Ensemble II	1
DNCE 161	Teaching Methods in Dance	3
DNCE 165	Production Management	2 - 2.5
DNCE 153	Capoeira: Afro/Brazilian Martial Arts I	.5 - 1
DNCE 158	Hawaiian and Tahitian Dance I	.5 - 1

Group I Electives - Afro-Cuban/Brazilian (Select one course)

DNCE 150	Afro-Cuban/Brazilian Dance II	1
DNCE 249	Afro-Cuban/Brazilian Dance III	1
DNCE 250	Afro-Cuban/Brazilian Dance IV	1

Group II Electives - Latin Social (Select one course)

DNCE 152	Latin Social Dance II	1
DNCE 251	Latin Social Dance III	1
DNCE 252	Latin Social Dance IV	1

Group III Electives - Capoeira or Hawaiian and Tahitian (Select one course)

DNCE 154	Capoeira: Afro/Brazilian Martial Arts II	.5 - 1
DNCE 253	Capoeira: Afro/Brazilian Martial Arts III	.5 - 1
DNCE 254	Capoeira: Afro/Brazilian Martial Arts IV	.5 - 1
DNCE 159	Hawaiian and Tahitian Dance II	.5 - 1
DNCE 258	Hawaiian and Tahitian Dance III	.5 - 1
DNCE 259	Hawaiian and Tahitian Dance IV	.5 - 1

Group IV Electives - Drumming (Select one courses)

DNCE/MUS 137	Cuban and Brazilian Drumming I	.5 - 1
DNCE/MUS 138	Cuban and Brazilian Drumming II	.5 - 1
DNCE 237	Cuban and Brazilian Drumming III	.5 - 1
DNCE 238	Cuban and Brazilian Drumming IV	.5 - 1

Group VII Electives (Select one course)

DNCE 102	The Hollywood Musical: Dance on Film	3
DNCE 105	Introduction to Dance History	3
DNCE 110	Modern Dance I	1
DNCE 115	Ballet I	1
DNCE 120	Jazz Technique I	1
DNCE 130	Tap I	1
DNCE 155	Hip Hop I	1
TOTAL UNITS		**27-34**

DEAF STUDIES (AA)

The Associate's Degree in Deaf Studies entails ASL courses in the first two years of ASL/Deaf studies, ASL 1-4, ASL 115 "Perspectives on Deafness", ASL 105 "Fingerspelling" and ASL 110 "Awareness of Deaf Culture". Students will develop ASL skills from a beginning to advanced level. They will also develop a strong foundation for understanding American Deaf Culture in order to facilitate their comfortable interaction and functionality within the deaf community.

A.A. DEGREE MAJOR

Program Requirements		Units
ASL100	American Sign Language I	4
ASL101	American Sign Language II	4
ASL105	Fingerspelling	3
ASL110	Awareness of Deaf Culture	3
ASL115	Perspectives on Deafness	3
ASL205	American Sign Language III	4
ASL206	American Sign Language IV	4
TOTAL UNITS		**25**

DIESEL TECHNOLOGY (AS, CA)

The Diesel Technology program at Palomar College gives the student an opportunity to gain the skills and knowledge needed for success in the challenging field of Diesel Technology, learning about servicing and maintaining diesel powered highway trucks, off-road heavy equipment, and stationary engines. The two-year program which leads to a Certificate of Achievement can also be applied towards an Associate in Science Degree in Diesel Technology.

A.S. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT

Program Requirements		Units
DMT 100	Introduction to Diesel Mechanics	4
DMT 105	Heavy-Duty Diesel Tune-Up/Analysis	4
DMT 110	Heavy-Duty Electricity	4
DMT 120	Air Brake Systems	4
DMT 125	Truck Transmission and Drive Lines	4
DMT 200	Diesel Engine Rebuilding I	4
DMT 201	Diesel Engine Rebuilding II	4

Electives (Select 4 units)

AT 160	Associated Studies in Automotives	3
CE 100	Cooperative Education	1 - 4
DMT 115	Alternative Fuels	4
DMT 130	Medium-Duty Diesel Engine Tune-Up	4
DMT 135	Basic Hydraulics	4
DMT 196	Special Problems In Diesel Technology	.5 - 3
DMT 197	Diesel Mechanics Technology Workshop	.5 - 3
IT/WELD 108	Technical Mathematics	3
	or	
MATH 56	Beginning/Intermediate Algebra	6
	or	
MATH 60	Intermediate Algebra	4
	or	
MATH 100	Exploring Mathematics	3
WELD 100	Welding I	3
TOTAL UNITS		**32**

DIGITAL IMAGING (AS, CA)

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.S. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT

Program Requirements		Units
GC 101	History of Graphic Communications	3
GCIP 140	Digital Imaging/Photoshop I	3
GCIP 141	Digital Imaging/Photoshop II	3
GCIP 240	Digital Imaging/Photoshop III	3
GCMW 102	Web Page Layout I	3
GCMW 115	Web Page Layout/WordPress	2
GCMW 204	Motion Graphics for Multimedia	3
GCMW 205	Digital Video for Multimedia	3
PHOT 130	Digital Darkroom I	3

Electives (select one)

GCIP 152	Digital Publishing/Illustrator I	3
GCIP 168	Digital Imaging with Drones	3
GCIP 170	Screen Printing	3
GCMW 165	Digital Video Design	3
GCMW 201	Multimedia II	3
GCMW 205	Digital Video for Multimedia	3
TOTAL UNITS		**29**

DIGITAL MEDIA (CP)

This program encompasses digital video editing in 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/DBA 125	Beg Film/Video Field Production	3
	or	
GCMW 165	Digital Video Design	3
CINE/DBA 270	Digital Video Editing	3
DBA/CINE 275	Avid Editing for Television & Film	3
GCMW 204	Motion Graphics for Multimedia	3
GCMW 205	Digital Video for Multimedia	3
TOTAL UNITS		**15**

DIGITAL VIDEO (AS, CA)

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

A.S. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT

Program Requirements		Units
GCIP 140	Digital Imaging/Photoshop I	3
GCMW 165	Digital Video Design	3
GCMW 204	Motion Graphics for Multimedia	3
GCMW 205	Digital Video for Multimedia	3
DBA/CINE 125	Beginning Film and Video Field Production	3
DBA 230	Digital Audio Avid Pro Tools	3
DBA/CINE 170	Introduction to Video Editing	3
DBA/CINE 270	Digital Video Editing	3

Electives (2 courses required, 6 units minimum)

ARTI 246	Digital 3D Design and Modeling	3
ARTI 247	Digital 3D Design and Animation	3
DBA 110	Broadcast and Media Writing	3
DBA/ENTT 120	Digital Television Studio Production	3
DBA 150	Performance and Acting for Broadcast and Film	3
DBA/CINE 275	Avid Editing for Television and Film	3
DBA/CINE 225	Intermediate Film and Video Field Production	3
GCIP 141	Digital Imaging/Photoshop II	3
GCIP 152	Digital Publishing/Illustrator I	3
GCIP 168	Digital Imaging with Drones	3
GCIP 240	Digital Imaging/Photoshop III	3
GCMW 101	Multimedia I	3
GCMW 201	Multimedia II	3
TOTAL UNITS		**30**

DRAFTING AND DESIGN CADD/CAM TECHNOLOGY (AS,CA)

The Drafting and Design CADD/CAM Technology Program prepares students with 2D and 3D technical drafting and software skills necessary to form a robust foundation in Computer-Aided Drafting and Design (CADD) and Computer Aided Manufacturing (CAM) as it applies to the mechanical engineering field. The emphasis in this program is to attain software training on industry specific software. Additionally, students will learn CNC machining using MasterCAM software to better understand the manufacturing side of design. Students will design virtual parts on a computer screen and use computer numeric controls (CNC) machine tools to build parts. Completion of this program prepares students for entry level drafting employment using a variety of software programs typically used in local industry for 2D and 3D mechanical engineering drafting, design and manufacturing.

A.S. DEGREE MAJOR/CERT. ACHIEVEMENT

Program Requirements Units		
DT/ENGR 101	AutoCAD I	3
DT/ENGR 102	AutoCAD II	3
DT/ENGR 103	SolidWorks I	3
DT/ENGR 104	SolidWorks II	3
DT 114	Creo I	3
DT 115	Creo II	3
MACH/DT/ENGR/		
WELD 190	CNC Machining MasterCam I	3
MACH 191	CNC Machining MasterCam II	3
TOTAL UNITS		**24**

DRONE APPLICATIONS AND TECHNOLOGIES (AS)

This program will prepare students to become remote pilots or entrepreneurs in fields that currently deploy Drones / Unmanned Aircraft Systems (UAS) in their operations. These fields include environmental science and management, real estate, journalism, search and rescue, agriculture, disaster response and management, and cultural resource management among others. This program will provide students with skills in UAS operations as well as the knowledge necessary to plan, create, and develop a UAS based business.

A.S. DEGREE MAJOR

Program Requirements		Units
GCIP 168	Digital Imaging with Drones	3
GCIP 268	Digital Imaging with Drones II	3
GEOG 140	Introduction to Remote Sensing and Drone Data Processing	3
GEOG 120	Digital Earth: Introduction to Geographic Information Systems	4
GEOG 110	Meteorology: Weather and Climate	3
GEOG 158	Small Unmanned Aircraft Systems Procedures and Regulations	1
BMGT 153	Small Business Entrepreneurship	3
CE 150	Cooperative Education Internship	1
	or	
CE 100	Cooperative Education	1

Select two courses:

GEOG 132	Database Management and Data Acquisition	4
GEOG 197	Geography Topics	1 - 4
ENGR 126	Introduction to Electrical and Computer Engineering	4
GCMW 165	Digital Video Design	3
BUS 152	Social Media for Business	3
GCMW 205	Digital Video for Multimedia	3
TOTAL UNITS		**23-29**

DRONE OPERATIONS (CA)

This program will prepare students for employment in all fields that currently employ Unmanned Aircraft Systems (UAS) in their operations. These fields include environmental science and management, real estate, journalism, search and rescue, agriculture, wildfire mapping, and cultural resource management. This certificate will provide students with a basic understanding of factors impacting UAS operations, and hands-on experience with processing, disseminating, and integrating data from UAS.

CERTIFICATE OF ACHIEVEMENT

Program Requirements		Units
GCIP 168	Digital Imaging with Drones	3
GCIP 268	Digital Imaging with Drones II	3
GEOG 110	Meteorology: Weather and Climate	3
GEOG 120	Digital Earth: Introduction to Geographic Information Systems	4
GEOG 140	Introduction to Remote Sensing and Drone Data Processing	3
GEOG/GCIP/		
GEOL 158	Small Unmanned Aircraft Systems Procedures and Regulations	1
TOTAL UNITS		**17**

DRYWALL/LATHER (AS, CA)

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.S. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT

Program Requirements		Units
AP DL/AP AC/		
AP PL 701	Orientation	1.5
AP DL/AP PL/		
AP AC 702	Safety and Health Certifications	1.5
AP DL/AP PL/		
AP AC 703	Printreading	1.5
AP DL 705	Basic Lathing	1.5
AP DL 706	Framing Ceilings and Soffits	1.5
AP DL 707	Basic Metal Framing	1.5
AP DL 708	Framing Suspended Ceilings	1.5
AP DL 709	Framing Curves and Arches	1.5
AP DL 710	Light Gage Welding - AWS - A	1.5
AP WE 712	Drywall/Acoustical Work Experience	4

Electives (Select 3 courses)		
AP AC 705	Acoustical Ceilings	1.5
AP AC 706	Standard Acoustical Grids	1.5
AP AC 711	Designer and Specialty Trims	1.5
AP C/		
AP DL 739	Door and Door Hardware	1.5
AP C/AP AC/		
AP DL/		
AP PL 774	Tool & Equipment Applications	1.5
AP DL/		
AP AC 704	Advanced Printreading	1.5
AP DL 712	Basic Hand Finishing	1.5
AP DL 713	Drywall Acoustical Ceilings	1.5
AP DL 714	Door/Door Frames	1.5
AP DL/		
AP PL 715	Exterior Insulation Finish Systems (EIFS)	1.5
AP DL/		
AP PL 716	Firestop/Fireproofing Procedures	1.5
AP DL 717	Free-Form Lathing	1.5
AP DL 718	Automatic Finishing Tools	1.5
AP DL 720	Drywall Installation/Finish Trims	1.5
AP DL 721	Advanced Hand Finishing	1.5
AP DL 722	Advanced Automatic Finishing Tools	1.5
AP DL 723	Advanced Lathing	1.5
AP DL 724	Ceiling and Soffit Finishing	1.5
AP DL 726	Reinforced Substrate Installations	1.5
AP DL 728	Drywall Applications	1.5
AP DL 729	Advanced Metal Framing	1.5
AP DL 730	Air, Moisture & Thermal Barriers	1.5
AP DL 731	Drywall Repair and Finishing	1.5
AP DL 732	Light Gage Welding AWS (B)	1.5
AP DL 797	Drywall/Lather Topics	.5 - 4
TOTAL UNITS		**21 - 24.5**

E-MARKETING (AS, CA)

This program combines business skills in marketing and advertising with technical skills in web design and digital media production. Students will gain a working knowledge of Web 2.0 techniques used in e-marketing such as digital media design, search engine optimization, social networking, and other methods of creating digital content for driving website traffic.

A.S. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT

Program Requirements		Units
BUS 155	Marketing	3
BUS 150	Advertising	3
BUS 152	Social Media for Business	3
BUS 125	Business English	3
	or	
BUS 205	Business Communication	3
GCIP 140	Digital Imaging/Photoshop I	3
GCMW 177	Search Engine Optimization (SEO) for Web Design	3
GCMW 115	Web Page Layout/WordPress	2
	or	
GCMW 102	Web Page Layout I	3

Electives (Select 6 units)		
BUS 100	Introduction to Business	3
BUS 145/		
FASH 125	Retailing/Promotion	3
BUS 157	E-Commerce	3
JOUR 200	Mastering Social Media	3
GCIP 141	Digital Imaging/Photoshop II	3
GCIP 240	Digital Imaging/Photoshop III	3
GCMW 106	Multimedia for Social Networking	3
GCMW 120	Designing for the Social Web	3
TOTAL UNITS		**26 - 27**

EARLY CHILDHOOD EDUCATION (AS-T)

"The Associate in Science in Early Childhood Education for Transfer includes a selection of courses designed to align with the lower division child development/early childhood education programs offered in the CSU system. The degree provides academic preparation to individuals for a career as an early childhood educator. The program will give students general knowledge and skills in theory, principles, and techniques for working with young children."

The Student Transfer Achievement Reform Act (now codified in California Education sections 66746-66749) guarantees admission to a California State University (CSU) campus for any community college student who completes an associate degree for transfer, a newly established variation of the associate degrees traditionally offered at a California community college. The Associate in Science (AS-T) for Transfer is intended for students who plan to complete a bachelor's degree in a similar major at a CSU system. Students completing these degrees (AA-T or AS-T) are guaranteed admission to the CSU system, but not to a particular campus or major. In order to earn one of these degrees, students must complete a minimum of 60 required semester units of CSU-transferable coursework with a minimum GPA of 2.0. Students transferring to a CSU campus that does accept the AS-T will be required to complete no more 60 units after transfer to earn a bachelor's degree (unless the major is designated "high-unit" major). This degree may not be the best option for students intending to transfer to a particular CSU campus or university or college that is not part of the CSU system. Students should consult with a counselor when planning to complete the degree for more information on university admission and transfer requirements.

Pursuant to SB1440, the following completion requirements must be met:
"(1) Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:

(A) The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education - Breadth Requirements.

(B) A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.

(2) Obtainment of a minimum grade point average of 2.0."

ADTs also require that students must earn a C or better in all courses required for the major or area of emphasis. A "P" (Pass) grade is also an acceptable grade for courses in the major if the course is taken on a Pass/No Pass basis.

Students completing this degree program may enter the following careers (examples, but not limited to):
Infant/Toddler lead or co-teacher
Preschool lead or co-teacher
Family childcare provider
Early childhood community agency service provider or home visitor
Early childhood curriculum specialist

AS-T TRANSFER MAJOR

Program Requirements		Units
CHDV 100	Child Growth and Development	3
CHDV 101	Principles and Practices of Teaching Young Children	3
CHDV 105	Observation and Assessment	3
CHDV 105A	Observation, Assessment, and Participation Lab: Preschool or	1
CHDV 105B	Observation, Assessment, and Participation Lab: Infant/Toddler or	1
CHDV 105C	Observation, Assessment, and Participation Lab: Early Inclusion	1
CHDV 115	Child, Family, and Community	3
CHDV 120	Health, Safety, and Nutrition	3
CHDV 172	Teaching in a Diverse Society	3
CHDV 185	Introduction to Curriculum	3
CHDV 201	Practicum in Early Childhood Education	4
TOTAL UNITS		**26**

ECONOMICS (AA, CA)

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		Units
ECON 101	Principles of Economics (Macro)	3
ECON 102	Principles of Economics (Micro)	3

Group I (Select 6 units)

ECON 110	Comparative Economic Systems	3
ECON 115	Economic History of the United States	3
ECON 120	Environmental Economics	3
ECON 125	Introduction to Labor Studies	3
ECON 295	Directed Study in Economics	3
IBUS 100	Intro to Int'l Business Management	3

Group II (Select 7-8 units)

MATH 110	College Algebra	4
MATH 120	Elementary Statistics	4
MATH 130	Calculus for the Social Sciences	4

Group III (Select 3 units)

CSIT 105	Computer Concepts and Applicatons	3
PHIL 200	Critical Thinking	3
TOTAL UNITS		**23**

ECONOMICS (AA-T)

The Associate in Arts in Economics for Transfer degree is designed to prepare students for a seamless transfer into the CSU system to complete a baccalaureate degree in Economics. The Associate in Arts in Economics for Transfer 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 are strongly encouraged to take 6 units of Economic elective courses: Econ 110 (Comparative Economic Systems), Econ 115 (Economic History of the United States), Econ 120 (Environmental Economics), and/or Econ 125 (Introduction to Labor Studies).

Pursuant to SB1440, the following completion requirements must be met:

(1) Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:

(A) The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements.

(B) A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.

(2) Obtainment of a minimum grade point average of 2.0.

ADTs also require that students must earn a C or better in all courses required for the major or area of emphasis. A "P" (Pass) grade is also an acceptable grade for courses in the major if the course is taken on a Pass/No Pass basis.

Required Core (12-13 units)

ECON 101	Principles of Economics (Macro)	3
ECON 102	Principles of Economics (Micro)	3
MATH 120	Elementary Statistics	4
MATH 130	Calculus for Business and the Social Sciences or	4
MATH 140	Calculus with Analytic Geometry, First Course	5

List A: Select One (3-4 Units)

BUS 205	Business Communication	3
BUS 104	Business Information Systems	3
CSIT 105	Computer Concepts and Applications or	3
CSIT 125	Computer Information Systems	3

List B: Select one course from List A not already used or choose one course from the following: (3-4 units)

ECON 110	Comparative Economic Systems	3
ECON 115	Economic History of the United States	3
ECON 120	Environmental Economics	3
ECON 125	Introduction to Labor Studies	3
ECON 295	Directed Study in Economics	3
TOTAL UNITS		**20 - 21**

ELECTRICIAN (AS, CA)

A five-year apprenticeship program. Applications for Riverside/San Bernardino/Mono/Inyo counties should apply to the Riverside and San Bernardino Joint Electrical Apprenticeship Training. Committees, 1855 Business Center Drive, San Bernardino, CA 92408. Telephone: (909) 890-1703.

A.S. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT

Program Requirements		Units
AP E 701	Electrical Trade/Industry/DC/Conduit	4
AP E 702	Electrical Theory/Practice/Blueprint Reading	4
AP E 703	Inductance/Capacitance Theory	4
AP E 704	Transformers/Code Calculations/Conduit	4
AP E 705	Electronic/Industrial Blueprints	4
AP E 706	Grounding/Electrical Services/Connection	4
AP E 707	Motor Control/Pilot Devices/Starters	4
AP E 708	Digital Electronics	4
AP E 709	Mgmt/Alarms/Testing/Wiring	4
AP E 710	Programmable Logic Controllers	4
AP WE 713	Electrician Work Experience	16
TOTAL UNITS		**56**

ELECTRICAL ENGINEERING DRAFTING AND DESIGN TECHNOLOGY (AS, CA)

The Electrical Engineering Drafting and Design Technology Program provides students with a foundation of electrical theory, electrical components, and hands-on practical skills necessary to layout and design printed circuit boards (PCB) using AutoCAD and Altium software. PCB layout, PCB materials, industrial materials, technical mathematics, component libraries, schematic concepts, design intent implementation, design rule creation, schematic capture, signal integrity, and transmission will be taught while adhering to industry standards. Students will learn to use basic electronics lab equipment such as oscilloscopes, power supplies, and signal generators. Students will be able to create an industry standard competed package of related drawings for fabrication, assembly and manufacturing of an advanced printed circuit board design. Completion of this program prepares students for entry level drafting employment in the electrical engineering drafting and design field.

A.S. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT

Program Requirements		Units
DT/ENGR 101	AutoCAD I	3
IT/WELD 108	Technical Mathematics	3
DT/ENGR/ WELD 117	Blueprint Reading and Geometric Dimensioning and Tolerance	3
DT 225	Exploring Robotics and Electrical Circuits	3
DT/ENGR 226	Printed Circuit Board Design	3
DT/ENGR 227	Advanced Printed Circuit Board Design	3
MACH 228	Metallurgy and Industrial Materials	3
TOTAL UNITS		**21**

ELECTRONIC TUNE UP AND COMPUTER CONTROL SYSTEMS (AS, CA)

This program will prepare students for entry level positions in all aspects of the Automotive Industry with an emphasis in drive-ability concerns.

A.S. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT

Program Requirements		Units
AT 105	Automotive Electricity	2
AT 105L	Automotive Electricity Computer Training Lab	1
AT 110	Automotive Tune up and Engine Analysis	3
AT 110L	Automotive Tune up and Computer Training Lab	1
AT 115	Automotive Fuel Injection and Fuel Systems	3
AT 115L	Automotive Fuel Systems Computer Training Lab	1
AT 160	Associated Studies in Automotives	3
AT 210	Specialized Automotive Electronics	3
AT 215	Automotive Emission Control	3
IT/WELD 108	Technical Mathematics	3

Electives (Select 6-7 units)

AT 100	Auto Maintenance and Minor Repair	3
AT 165	Automotive Air Conditioning	2
AT 170	Auto Repair Shop Experience	2
DMT 130	Medium-Duty Diesel Engine Tune-Up	4
	or	
DMT 105	Heavy-Duty Diesel Tune-Up and Engine Analysis	4
WELD 100	Welding I	3
CE 100	Cooperative Education	2 - 3
TOTAL UNITS		**29 - 30**

EMT BASIC (CP)

This program prepares the student with the knowledge and skills necessary to take the National Registry EMT examination and enter the workforce in the State of California.

CERTIFICATE OF PROFICIENCY

Program Requirements		Units
EME 100/HE 104	Emergency Medical Responder	3
EME 106	Emergency Medical Technician (Lecture)	6
EME 106L	Emergency Medical Technician Skills (Laboratory)	1.5
TOTAL UNITS		**10.5**

ENGINEERING (AS)

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.S. DEGREE MAJOR

Program Requirements		Units
(Select a minimum of 11 units)		
DT/ENGR 101	AutoCAD Introduction to Computer Aided Drafting	3
	or	
DT/ENGR 103	SolidWorks Introduction to 3D Design and Presentation	3
ENGR 126	Intro Electric/Computer Engineering	4
	or	
ENGR 245	Properties of Materials	4
ENGR 210	Electrical Network Analysis	3
ENGR 210L	Electrical Network Analysis Laboratory	1
ENGR 235	Engineering Mechanics Statics	3
ENGR 236	Engineering Mechanics Dynamics	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 110L	General Chemistry Laboratory	2
CHEM 115	General Chemistry	3
CHEM 115L	General Chemistry Laboratory	2
MINIMUM TOTAL UNITS		**41**

Recommended Elective: ENGR 100

ENG 100 or ESL 110, ENG 202, and BIOL 100 are highly recommended as electives to fulfill General Education requirements.

ENGLISH (AA)

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

AA DEGREE MAJOR

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

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

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

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

ENG 135	Introduction to Creative Writing	4
ENG 136	Intermediate Creative Writing	4
ENG 137	The Literary Magazine: History/Production	4
ENG 215	Introduction to the British Novel	3
ENG 230	Introduction to the American Novel	3
ENG 240	Introduction to Classical Mythology	3
ENG 245	Survey of Biblical Literature	3
ENG 250	Introduction to Shakespeare	3
ENG 255	Literature and Ideas	3
ENG 260	Literature Through Film	3
ENG 265	Science Fiction	3
ENG 270	Popular Literature	3
ENG 280	Women and Literature	3
ENG 290	Comic Books as Literature	3
TOTAL UNITS		**22 - 24**

ENGLISH (AA-T)

The discipline of English focuses on the English language and literatures in English. It prepares students for transfer as an English major to a CSU or other four-year university and provides the background for students to succeed in diverse fields. 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.

Pursuant to SB1440, the following completion requirements must be met:

(1) Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:

(A) The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements.

(B) A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.

(2) Obtainment of a minimum grade point average of 2.0. ADTs also require that students must earn a C or better in all courses required for the major or area of emphasis. A "P" (Pass) grade is also an acceptable grade for courses in the major if the course is taken on a Pass/No Pass basis.

AA-T TRANSFER MAJOR

Program Requirements (Select one option)
Option I

*ENG 202	Critical Thinking and Composition and	4
*ENG 205	Introduction to Literature	3

Option II

*ENG 203	Critical Thinking and Composition Through Literature	4

List A (Select two courses)

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

List B (Select courses based on Option I or II completed above)
For Option I, select one course
For Option II, select two courses
Any course(s) from List A not already used and/or select from the list below.

ENG 135	Introduction to Creative Writing	4
ENG 215	Introduction to the British Novel	3
ENG 230	Introduction to the American Novel	3
ENG 240	Introduction to Classical Mythology	3
ENG 245	Survey of Biblical Literature	3
ENG 250	Introduction to Shakespeare	3
ENG 255	Literature and Ideas	3
ENG 260	Literature through Film	3
ENG 265	Science Fiction	3
ENG 270	Popular Literature	3
ENG 280	Women and Literature	3
ENG 290	Comic Books as Literature	3

List C (Select one course)
Any course from List A or B not already used or select from the list below.

ENG 136	Intermediate Creative Writing	4
ENG 137	The Literary Magazine: History and Production	4
ENG 150	Introduction to Linguistics	3
HUM 100	Introduction to Humanities I	3
TOTAL UNITS		**19 - 21**

*Course is required major preparation at CSU San Marcos (CSUSM). Students planning to transfer to CSUSM are advised to select these courses to complete this degree. For more information on this major at CSUSM, please refer to the articulation agreement at ASSIST.ORG.

ENTRY-LEVEL GAS METAL ARC/FLUX CORED ARC WELDING (CP)

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/WELD 108	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 (CP)

Introdution to GTAW, GMAW, and SMAW welding process with concentration on GTAW. Basic math, print reading, and layout skills and knowllede will be taught to prepare students for entry-level employment as a GTAW welder.

CERTIFICATE OF PROFICIENCY

Program Requirements		**Units**
IT/WELD 108	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 (CP)

Provides the skills necessary for entry-level employment as a shielded metal arc welder.

CERTIFICATE OF PROFICIENCY

Program Requirements		**Units**
IT/WELD 108	Technical Mathematics	3
WELD 100	Welding I	3
WELD 110	Shielded Metal Arc Welding	3
WELD 135	Print Reading for Welders	3
WELD 160	Metal Layout for Fabrication	3
TOTAL UNITS		**15**

ENVIRONMENTAL STUDIES (CA)

The Certificate of Proficiency provides an introduction to modern environmental issues and sustainability through relevant coursework in the physical sciences, life sciences, social sciences, and geographic information systems (GIS).

CERTIFICATE OF ACHIEVEMENT

Program Requirements		**Units**
GEOG 100	Earth's Dynamic Environment: Introduction to Physical Geography	3
GEOG 105	People and the Environment: Introduction to Human Geography	3
GEOG 120	Digital Earth: Introduction to Geographic Information Systems	4
BIOL 118	Introductory Biology: Ecology (Lecture)	3
PHSC 101	Principles of Physical Science	3
TOTAL UNITS		**16**

FASHION DESIGN (AS, CA)

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 for additional information.

A.S. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT

Program Requirements		Units
FASH 100	Fashion Industry	3
FASH 105	Fashion Analysis and Clothing Selection	3
FASH 110	Textiles	3
FASH 130	History of Fashion/Costume	3
FASH 135	Introductory Sewing for Apparel	3
FASH 136	Advanced Sewing for Apparel	3
FASH 139	Pattern Making/Fashion Design	3
FASH 141	Advanced Pattern Making/Draping	3
FASH 145	Fashion Illustration and Presentation	3
FASH 148	Digital Design for Fashion	3
TOTAL UNITS		**30**

FASHION MERCHANDISING (AS, CA)

The Fashion Merchandising A.S. 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, fashion stylist, 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 for additional information.

A.S. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT

Program Requirements		Units
FASH 100	Fashion Industry	3
FASH 105	Fashion Analysis and Clothing Selection	3
FASH 115	Visual Merchandising I	3
FASH 110	Textiles	3
FASH 120	Fashion Buying/Management II	3
FASH 125/		
BUS 145	Retailing/Promotion	3
FASH 126	Fashion Show Presentation	3
FASH 130	History of Fashion/Costume	3
FASH 148	Digital Design for Fashion	3
FASH 175	Analysis, Evaluation, and Comparison of Ready-to-Wear	3
TOTAL UNITS		**30**

FASHION: VISUAL MERCHANDISING (AS, CA)

To acquaint the student with basic techniques of effective retail store presentations including window and interior displays. Course activities include constructing and installing displays and designing store environments. Students will utilize fixtures, lighting, mannequins, and other display materials.

A.S. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT

Program Requirements		
FASH 100	Fashion Industry	3
FASH 105	Fashion Analysis and Clothing Selection	3
FASH 115	Visual Merchandising I	3
FASH 116	Visual Merchandising II	3
BUS 145/		
FASH 125	Retailing/Promotion	3
FASH 126	Fashion Show Presentation	3
FASH 130	History of Fashion/Costume	3
FASH 148	Digital Design for Fashion	3
FASH 195	Field Studies in Fashion	2
	or	
FASH 155	World of Fashion	2 - 3
CE 150	Cooperative Education Internship	2 - 3
ID/ARCH 150	Beginning Computer Aided Drafting	3
TOTAL UNITS		**31 - 33**

FILM, TELEVISION, AND ELECTRONIC MEDIA (AS-T)

The Associate in Science in Film, Television, and Electronic Media for Transfer (AS-T) prepares students to transfer to California State University campuses that offer bachelor's degrees in Film, Television, and Electronic Media. The degree prepares students to demonstrate basic understanding of broad film, television and electronic media trends as well as demonstrate the production craft skills for futher development at the university level. The degree is ideal for students who plan to transfer for further study to pursue a baccalaureate degree in Film, Television, and Electronic Media.

Pursuant to SB1440, the following completion requirements must be met:

(1) Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:

(A) The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements.

(B) A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.

(2) Obtainment of a minimum grade point average of 2.0.

AS-Ts also require that students must earn a C or better in all courses required for the major or area of emphasis. . A "P" (Pass) grade is also an acceptable grade for courses in the major if the course is taken on a Pass/No Pass basis.

AS-T Transfer Major (18 units or more)

AS-T TRANSFER MAJOR

Program Requirements (minimum 6 units)
Required Core: Select two (minimum 6 units) Students who choose to take DBA 110 as a part of their 6 unit required core must also take CINE/DBA 115 in addition to either CINE 100 or DBA 100.

DBA 100	Introduction to Radio and TV	3
CINE 100	Art of the Cinema	3
DBA 110	Broadcast and Media Writing	3
	and	
CINE/DBA 115	Creative Writing for Television and Cinema	3

LIST A: Select one from each area (6 units)

Area 1: Audio

DBA 230	Digital Audio Avid Pro Tools	3
DBA 130	Radio Production	3

Area 2: Video or Film Production

CINE 125	Beginning Single Camera Film and Video Production	3
DBA 120	Digital Television Studio Production	3
CINE 225	Intermediate Single Camera Film and Video Production	3

LIST B: Select one (3 units) from below or any course not already used above.

ART 100	Introduction to Art	3
CINE 102	History of Film to 1945	3
CINE 103	History of Film 1945 - Present	3
PHOT 100	Elementary Film and Darkroom Photography	3
TA 100	Introduction to the Theatre	3

LIST C: Select one (3 units) from below or any course not already used above.

DBA 170	Introduction to Video Editing	3
DBA 220	TV Production and Directing	3
DBA 298A	Beginning Broadcast Internship	3
TOTAL UNITS		**18 - 21**

FIRE ACADEMY (CA)

Training to meet the requirements mandated by the California Office of State Fire Marshal for Certified Fire Fighter 1. 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.

Prepares students for a career in the fire suppression/protection field. The student also receives additional certifications from the California State Fire Marshall's Office.

CERTIFICATE OF ACHIEVEMENT

Program Requirements

EME 100/HE 104	Emergency Medical Responder	3
EME 106	Emergency Medical Technician (Lecture)	6
EME 106L	Emergency Medical Technician Skills (Laboratory)	1.5
FIRE 151	Fire Fighter 1 Academy	20
TOTAL UNITS		**30.5**

FIRE TECHNOLOGY - EMERGENCY MANAGEMENT (AS, CA)

Prepares student for career in Emergency Management.

A.S. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT

Program Requirements		**Units**
FIRE 100	Fire Protection Organization	3
FIRE 115	Hazardous Materials I	3
FIRE 120	Building Construction for Fire Protection	3
FIRE 131	Introduction to Emergency Management	3
FIRE 132	Disaster Response and Recovery	3
FIRE 133	Disaster Mitigation	3
FIRE 142	Fire Ethics	3

Electives	**(Select 12 units)**	
FIRE 51	Fire Academy Preparation	3
FIRE 71	Trench Rescue	.5
FIRE 72	Swiftwater Rescue	.5
FIRE 98	Firefighter Skill and Update	1.5
FIRE 101	Firefighter Safety	3
FIRE 118	Fire Prevention Technology	3
FIRE 125	Fire Apparatus and Equipment	3
FIRE 130	Fire Protection Equipment and Systems	3
FIRE 145	Fire Fighting Tactics and Strategy	3
FIRE 151	Fire Fighter 1 Academy	20
FIRE 160	Wildland Fire Control I	3
FIRE 165	Fundamentals of Fire Protection Chemistry	3
FIRE 171A	Company Officer 2A/	
	Human Resource for Company Officers	2.5
FIRE 171B	Company Officer 2B/	
	General Administrative Function for Company Officers	1
FIRE 171C	Company Officer 2C/	
	Fire Inspections and Investigations for Company Officers	2.5
FIRE 171D	Company Officer 2D/All Risk	2.5
FIRE 171E	Company Officer 2E/Wildland Incident Operations	2.5
FIRE 172A	Instructor I/Instructional Methodology	2.5
FIRE 180	Fire Prevention 1A	2.5
FIRE 181	Fire Prevention 1B	2.5
FIRE 194	Fire Instructor 1B	2.5
FIRE 197A	Fire Technology General Topics	.5 - 5
FIRE 197B	Fire Technology Command Topics	.5 - 5
FIRE 197C	Fire Technology Field Topics	.5 - 5
TOTAL UNITS		**33**

FIRE TECHNOLOGY - GENERAL (AS, CA)

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

A.S. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT

Program Requirements		Units
FIRE 100	Fire Protection Organization	3
FIRE 101	Firefighter Safety	3
FIRE 118	Fire Prevention Technology	3
FIRE 120	Building Construction for Fire Protection	3
FIRE 130	Fire Protection Equipment and Systems	3
FIRE 165	Fundamentals of Fire Protection Chemistry	3
FIRE 142	Fire Ethics	3

Elective Courses (Select 15 units)

FIRE 51	Fire Academy Preparation	3
FIRE 71	Trench Rescue	.5
FIRE 72	Swiftwater Rescue	.5
FIRE 98	Firefighter Skill and Update	1.5
FIRE 115	Hazardous Materials I	3
FIRE 125	Fire Apparatus and Equipment	3
FIRE 131	Introduction to Emergency Management	3
FIRE 132	Disaster Response and Recovery	3
FIRE 133	Disaster Mitigation	3
FIRE 145	Fire Fighting Tactics and Strategy	3
FIRE 151	Fire Fighter I Academy	20
FIRE 160	Wildland Fire Control I	3
FIRE 171A	Company Officer 2A/	
	Human Resource for Company Officers	2.5
FIRE 171B	Company Officer 2B/	
	General Administrative Function for Company Officers	1
FIRE 171C	Company Officer 2C/	
	Fire Inspections and Investigations for Company Officers	2.5
FIRE 171D	Company Officer 2D/All Risk	2.5
FIRE 171E	Company Officer 2E/Wildland Incident Operations	2.5
FIRE 172A	Instructor I/Instructional Methodology	2.5
FIRE 180	Fire Prevention 1A	2.5
FIRE 181	Fire Prevention 1B	2.5
FIRE 194	Fire Instructor 1B	2.5
FIRE 197A	Fire Technology General Topics	.5 - 5
FIRE 197B	Fire Technology Command Topics	.5 - 5
FIRE 197C	Fire Technology Field Topics	.5 - 5
EME 106	Emergency Medical Tech Basic (Lecture)	6
CE 100	Cooperative Education	1 - 4
TOTAL UNITS		**36**

FOUNDATIONS IN TECHNICAL CAREERS (CP)

CERTIFICATE OF PROFICIENCY

The Certificate of Proficiency will provide students with foundational math, reading, writing, and computer skills needed to succeed in a technical occupation. This interdisciplinary program will incorporate curriculum from disciplines such as math, industrial technology, engineering, business, and computers science. Completers of this program can potentially secure entry level positions in a technical field while concurrently completing their associate's degree.

Program Requirements		
ENGR 100	Introduction to Engineering	1
MATH 115	Trigonometry	3
BUS 175	Excel Basic	1
	and	
BUS 176	Excel Intermediate	1
DT/ENGR 101	AutoCAD I	3
	or	
DT/ENGR 103	SolidWorks I	3
TOTAL UNITS		**9**

FRENCH (AA, CA)

This degree will provide required course work for students majoring in French. In addition, completing the course work will meet the foreign language competency requirements at many colleges and universities. Students may receive humanities credit on general education patterns for both the CSU and UC systems. It will also provide instruction for students seeking foreign language skills for personal development.

A.A. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT

Program Requirements		Units
FREN 101	French I	5
FREN 102	French II	5
FREN 201	French III	5
FREN 202	French IV	5
TOTAL UNITS		**20**

Recommended Electives: FREN 140, 215

GENDER AND WOMEN'S STUDIES (AA)

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	Race, Gender and Media Effects	3
ENG 280	Women and Literature	3
HIST 130	Women in United States History	3
PSYC/SOC 125	Human Sexuality	3
PSYC 130	Psychology of Gender	3
SOC 135	Gender and Society	3
PSYC/SOC 145	Psychology and Sociology of Aging	3
TOTAL UNITS		**18**

Recommended Electives: ENG 100 or ESL 110 and 202 with emphasis in Women's Studies issues.

CALIFORNIA STATE UNIVERSITY GENERAL EDUCATION BREADTH (CA)

Students who complete the California State University General Education (CSUGE) transfer pattern, commonly referred to at Palomar as the "blue sheet," may be awarded a Certificate of Achievement. Completion of the CSUGE pattern satisfies the lower-division general education requirements for the CSU system.

Although this certificate recognizes completion of the lower-division general education requirements, it does not guarantee admission into the CSU system.

CERTIFICATE OF ACHIEVEMENT

For a list of the approved courses for this program, please refer to the "California State University General Education (CSUGE) Requirements" listed in Section 7 (green pages) of the Catalog. Contact the Counseling Services Department with questions or for additional information.

Program Requirements	Units
Area A: English Language Communication and Critical Thinking	9
Area B: Scientific Inquiry and Quantitative Reasoning	9
Area C: Arts and Humanities	9
Area D: Social Sciences	9
Area E: Lifelong Learning and Self-Development	3
MINIMUM UNITS	**39**

GENERAL STUDIES (AA, AS)

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.

ASSOCIATE DEGREE MAJOR

Select An Area of Emphasis:
Students may earn only one General Studies degree.

Emphasis in Arts and Humanities
Select 18 units minimum
American Indian Studies 100, 104, 105, 108A, 108B, 135, 145, 146, 150, 166A, 166B, 167A, 167B, 207A, 207B, 266A, 266B
American Sign Language 100, 101, 110, 205, 206
American Studies 100, 105
Anthropology 135, 155
Arabic 101, 102, 201
Architecture 120, 121, 122
Art 100, 102, 104, 105, 163, 164, 165, 166
Chicano Studies 100, 155
Chinese 101, 102, 201
Cinema 100, 102, 103, 110, 120, 122, 123
Dance 100, 101, 102, 105
Digital Broadcast Arts 100
English 202, 203, 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
Fashion 130
Foreign Languages 207A, 207B
French 101, 102, 201, 202
German 101, 102, 201, 202
Graphic Communications 101, 102, 115
History 105, 106
Humanities 100, 101
Interior Design 115
Italian 101, 102, 201
Japanese 101, 102, 130, 201, 202
Multicultural Studies 125
Music 100, 101, 102, 103, 171
Philosophy 111, 113, 114, 116, 121, 122, 125, 126, 140, 141, 200, 250
Photography 125
Reading 110, 120
Religious Studies 101, 104, 105, 108, 110
Spanish 101, 101A, 101B, 102, 201, 202, 211, 212, 235
Speech 100, 105, 115
Theatre Arts 100, 140, 141, 150

Emphasis in Science and Mathematics
*Select 18 units minimum
Anthropology 100, 101
Astronomy 100, 120
Biology 100, 101, 102, 105, 106, 110, 114, 118, 120, 125, 126, 130, 131, 135, 140, 141, 145, 185, 200, 201, 210, 211, 212
Business 110
Chemistry 100, 104, 105, 110, 115, 205, 220, 221
CSIT-Information Technology 105
Earth Sciences 100, 115
Engineering 210
Geography 100, 110, 115, 125
Geology 100, 110, 120, 150
Health 165
Mathematics 56, 60, 100, 105, 106, 110, 115, 120, 130, 135, 140, 141, 200, 205, 206, 245
Nutrition 165, 185
Oceanography 100
Physical Science 100, 101
Physics 101, 102, 120, 121, 200, 201, 230, 231, 232
Psychology 205, 210
Sociology 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
Administration of Justice 100
Africana Studies 100, 101, 102, 120, 126
Alcohol and Other Drug Studies 150
American Indian Studies 101, 102, 115, 125, 130, 140, 165
American Studies 200
Anthropology 105, 107, 110, 115, 125, 126, 130, 137, 140
Business 136
Chicano Studies 101
Child Development 100, 110, 115
Communications 100, 105
Counseling 100, 110, 115, 120, 148
Economics 100, 101, 102, 110, 115, 120, 125
English 150
Family and Consumer Sciences 136, 150
Geography 103, 105
Graphic Communications-Multimedia & Web 100
Health 100
History 101, 102, 107, 108, 121, 130, 140, 141, 150, 151
Legal Studies 121, 240
Multicultural Studies 100, 125
Nutrition 120
Political Science 100, 101, 102, 110, 121, 240
Psychology 100, 105, 110, 115, 120, 125 130, 145, 150, 225, 235
Religious Studies 102, 108
Sociology 100, 105, 110, 115, 125, 130, 135,145, 150, 165, 200
Speech 120, 131
*Military Service

*Palomar College will accept a minimum of 3 units of ACE recommended credit for completion of Basic/Recruit Training. Refer to the Associate Degree District Requirements, under Health and Fitness or see a Counselor for more information.

GEOGRAPHIC INFORMATION SYSTEMS (CA)

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.

CERTIFICATE OF ACHIEVEMENT

Program Requirements		Units
GEOG 120	Digital Earth: Introduction to Geographic Information Systems	4
GEOG 132	Database Management and Data Acquisition	4
GEOG 134	GIS Applications and Programming	2
GEOG 136	Intermediate ArcGIS: GIS Analysis	2
GEOG 138	GIS Internship	2
TOTAL UNITS		**14**

GEOGRAPHY (AA-T)

The Associate in Arts in Geography for Transfer provides students with a comprehensive study of the earth from a spatial perspective. The field of geography includes several subfields. Physical geography is the study of natural phenomena such as weather, climate, geological formations, and the distribution of plants and animals. Human geography is the study of the spatial distribution of culture, language, religion, population, economics, and politics. Regional geography incorporates in-depth studies of specific geographic areas of the world. Cartography and Geographic Information Systems are analytical tools used in all subfields of geography.

Pursuant to SB1440, the following completion requirements must be met:

"(1) Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:

(A) The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education - Breadth Requirements.

(B) A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.

(2) Obtainment of a minimum grade point average of 2.0."

ADTs also require that students must earn a C or better in all courses required for the major or area of emphasis. A "P" (Pass) grade is also an acceptable grade for courses in the major if the course is taken on a Pass/No Pass basis.

AA-T TRANSFER MAJOR

Program Requirements

GEOG 100	Earth's Dynamic Environment: Introduction to Physical Geography	3
GEOG 105	People and the Environment: Introduction to Human Geography	3

Electives: List A (Select 6 - 7 units)

GEOG 100L	Earth's Dynamic Environment: Physical Geography Lab	1
GEOG 103	World Regional Geography	3
GEOG 110	Meteorology: Weather and Climate	3
GEOG 120	Digital Earth: Introduction to Geographic Information Systems	4
GEOG 125	California Geography	3
GEOG 195	Regional Field Studies in Geography	1 - 3

Electives: List B (Select 6 units not previously used to satisfy List A)

ANTH 105	Introduction to Cultural Anthropology	3
GEOL 100	Basic Geology	3
GEOG 100L	Physical Geography Laboratory	1
GEOG 103	World Regional Geography	3
GEOG 110	Meteorology: Weather and Climate	3
GEOG 115/		
ES 115	Natural Disasters and Environmental Hazards	3
GEOG 120	Digital Earth:	
	Introduction to Geographic Information Systems	4
GEOG 125	California Geography	3
GEOG 195	Regional Field Studies in Geography	1 - 3
TOTAL UNITS		**18 - 19**

GEOLOGY (AS)

Provides the student with sufficient background to begin upper division coursework and will prepare the student for entry-level jobs that require basic 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.S. DEGREE MAJOR

Program Requirements

Group One

GEOL 100	Physical Geology	3
GEOL 100L	Geology Laboratory	1
GEOL 150	Dinosaurs and Earth History	3
GEOL 150L	Dinosaurs and Earth History Laboratory	1

Group Two (A minimum of 2 units from the following)

GEOL 195A	Field Studies in Geology: Regional	1 - 3
GEOL 195B	Field Studies in Geology:	
	Southern California Coastal Region	1 - 3
GEOL 195C	Field Studies in Geology: Salton Trough Region	1 - 3
GEOL 195D	Field Studies in Geology: Colorado Plateau Region	1 - 3
GEOL 195E	Field Studies in Geology: Sierra Nevada Region	1 - 3
GEOL 195F	Field Studies in Geology: Death Valley Region	1 - 3

Group Three (Select at least two of the three options)
Option 1

MATH 140	Calculus with Analytic Geometry, First Course	5
MATH 141	Calculus with Analytic Geometry, Second Course	4

Option 2

PHYS 120	General Physics	4
PHYS 121	General Physics	4
	or	
PHYS 230	Principles of Physics	5
PHYS 231	Principles of Physics	5

Option 3

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

Group Four (Select at least 8 units or any course from Groups 2 or 3 not previously taken)

BIOL 100	General Biology	4
GEOG 120	Digital Earth:	
	Introduction to Geographic Information Systems	4
GEOL 110	General Geology: National Parks and Monuments	3
GEOL/ASTR 120	Planets, Moons, and Comets	3
GEOL 197	Geology Topics	1 - 3
GEOL 295	Directed Study in Geology	1 - 3
MATH 205	Calculus with Analytic Geometry, Third Course	4
MATH 206	Calculus with Differential Equations	4
OCN 100	Oceanography Lecture	3
OCN 100L	Oceanography Laboratory	1
PHYS 232	Principles of Physics	4
TOTAL UNITS		**34 - 38**

GEOLOGY (AS-T)

Geology is the study of the dynamic processes that shape Earth. Geology incorporates a multidisciplinary approach to describe and solve a variety of problems, including those related to human interaction with natural systems, geologic hazards, and resources. Students who successfully complete this degree will be prepared for transfer into upper division coursework in geology and will meet transfer requirements for admission to CSU.

Pursuant to SB1440, the following completion requirements must be met:
"(1) Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:
(A) The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education - Breadth Requirements.
(B) A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.

(2) Obtainment of a minimum grade point average of 2.0."

ADTs also require that students must earn a C or better in all courses required for the major or area of emphasis. A "P" (Pass) grade is also an acceptable grade for courses in the major if the course is taken on a Pass/No Pass basis.

AS-T TRANSFER MAJOR

Program Requirements

GEOL 100	Physical Geology	3
GEOL 100L	Geology Laboratory	1
GEOL 150	Dinosaurs and Earth History	3
GEOL 150L	Dinosaurs and Earth History Laboratory	1
CHEM 110	General Chemistry	3
CHEM 110L	General Chemistry Laboratory	2
CHEM 115	General Chemistry	3
CHEM 115L	General Chemistry Laboratory	2
MATH 140	Calculus with Analytic Geometry, First Course	5
MATH 141	Calculus with Analytic Geometry, Second Course	4
TOTAL UNITS		**27**

Additional Recommended Preparation

PHYS 230	Principles of Physics	5
PHYS 231	Principles of Physics	5
BIOL 100	General Biology	4

GERMAN (AA, CA)

This degree will provide required course work for students majoring or minoring in German. In addition, completing the course work will meet the foreign language competency requirements at many colleges and universities. It will also provide instruction for students seeking foreign language skills for personal development.

A.A. DEGREE MAJOR
CERTIFICATE OF ACHIEVEMENT

Program Requirements:

GERM 101	German I	5
GERM 102	German II	5
GERM 201	German III	5
GERM 202	German IV	5
GERM 225	German Reading and Conversation	3
TOTAL		**23**

GRAPHIC COMMUNICATIONS (AS, CA)

This certificate allows students to explore print, video and web with the opportunity to create their own branding and promotion. This also gives a strong graphic arts foundation.

Today's entrepreneurs must have an understanding of current trends in social media promoting through online video for hand held devices and streaming broadcast. Web functions allow the student to create an online presence. Print allows the student to create the product and/or service.

A.S. DEGREE MAJOR OR
CERTIFICATE OF ACHIEVEMENT

Program Requirements

GCIP 140	Digital Imaging/Photoshop I	3
GCIP 149	Page Layout and Design I	3
GCIP 152	Digital Publishing/Illustrator I	3
GCIP 170	Screen Printing	3
GCIP 172	Textile Screen Printing	3
GCMW 115	Web Page Layout/WordPress	2
GCMW 165	Digital Video Design	3

Electives (select three courses)

GCIP 105	Design for Print Production	3
GCIP 141	Digital Imaging/Photoshop II	3
GCIP 252	Digital Publishing/Illustrator II	3
GCIP 270	Commercial Screen Printing	3
GCMW 101	Multimedia I	3
GCMW 102	Web Page Layout I	3
GCMW 106	Multimedia for Social Networking	3
GCMW 201	Multimedia II	3
GCMW 204	Motion Graphics for Multimedia	3
GCMW 205	Digital Video for Multimedia	3
TOTAL UNITS		**29**

GRAPHIC DESIGN (AS)

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.S. DEGREE MAJOR

Program Requirements

ART 104	Design and Composition	3
ART 166	History of Art II - Survey of Western Art	3
ART 200	Color Theory	3
ARTI 100	Concept Sketching	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
ARTI 246	Digital 3D Design and Modeling	3
	Final Art Portfolio Review	0

Electives (Select 6-7 units)

ARTI 247	Digital 3D Design and Animation	3
ARTI 248	Digital 3D Design and Sculpture	3
ARTI 220	Illustration II, Digital Techniques	3
ART 120	Foundations of Life Drawing	3
PHOT 100	Elementary Film and Darkroom Photography	3
CE 100	Cooperative Education	1 - 4
TOTAL UNITS		**36 - 37**

GUITAR MAKING TECHNOLOGY (AS, CA)

Guitar Making Technology will prepare students to make a living or begin a career as a maker of guitars or as a guitar repair technician. Students will begin by gaining competency in basic woodworking processes including hand tool and power machine usage, finishing, and safety. During the course work students will construct up to four instruments including a ukulele, an electric guitar, a steel string guitar and an arch top guitar. Business building is thoroughly covered. This is a demanding and highly technical program. Students are expected to be dedicated, determined and committed.

A.S. DEGREE MAJOR OR
CERTIFICATE OF ACHIEVEMENT

Program Requirements

CFT 100	Fundamentals of Woodworking	4
CFT 108	Business Woodworking	2
CFT 132A	Ukulele Making I/Tenor Ukulele	4
CFT 133A	Guitar Technician I/Set-Up	2
CFT 134A	Electric Guitar Construction/Solid Body	2
CFT 135	Acoustic Guitar Making I	4
CFT 136	Acoustic Guitar Making II	4
CFT 149	Hand Joinery I	2
CFT 195	Finishing Technology/Touch-Up and Repair	2

Electives (Select 2 or more units)

CFT 132B	Ukulele Making II	4
CFT 133B	Guitar Technician II/Major Repair	2
CFT 134B	Electric Guitar Construction II/Custom	4
CFT 137	Arch Top Guitar Construction I	4
CFT 138	Arch Top Guitar Construction II	4
TOTAL UNITS		**28**

HISTORY (AA-T)

The Associate in Arts in History for Transfer (AA-T) includes a selection of courses designed to prepare students to transfer to California State University campuses that offer bachelor's degrees in History. The degree prepares stu¬dents to demonstrate basic understanding of broad historiographical trends as well as helps to develop the tools to critically analyze primary and secondary sources. The degree is ideal for students who plan to transfer for further study to pursue a baccalaureate degree in history.

Pursuant to SB1440, the following completion requirements must be met:

(1) Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:

(A) The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education Breadth Requirements.

(B) A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.

(2) Obtainment of a minimum grade point average of 2.0."

ADTs also require that students must earn a C or better in all courses required for the major or area of emphasis. A "P" (Pass) grade is also an acceptable grade for courses in the major if the course is taken on a Pass/No Pass basis.

Required Core

HIST 101	History of the United States Through Reconstruction	3
HIST 102	History of the United States Since Reconstruction	3

List A: Select two (6 units)

HIST 107	World History To 1650	3
	or	
HIST 105	History of Western Civilization Through the Reformation	3
HIST 108	World History Since 1650	3
	or	
HIST 106	History of Western Civilization Since the Reformation	3

List B: Select one course from each area (6 units)
Area 1 Diversity (3 units) or any List A course not already used:

HIST/MCS 160	History of the Middle East from 600 to the Present	3
HIST 140	History of the Americas Through 1800	3
HIST 141	History of the Americas Since 1800	3
HIST 150	History of Latin America to 1824	3
HIST 151	History of Latin America from Independence to the Present	3

Area 2 (3 units) or any List A course not already used:

HIST 121	History of California	3
HIST 130	Women in United States History	3
TOTAL UNITS		**18**

ILLUSTRATION (AS)

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.S. DEGREE MAJOR

Program Requirements		Units
ART 104	Design and Composition	3
ART 120	Foundations of Life Drawing	3
ART 166	History of Art II	3
ART 200	Color Theory	3
ARTD 150	Digital Concepts and Techniques in Art	3
ARTD 220	Motion Design	3
ARTI 100	Concept Sketching	3
ARTI 210	Illustration I	3
ARTI 220	Illustration II, Digital Techniques	3
ARTI 246	Digital 3D Design and Modeling	3
	Final Art Portfolio Review	0

Electives (Select 6 units)

ART 121	Intermediate Life Drawing	3
ART 125	Introduction to Portraiture	3
ART 220	Introduction to Painting	3
ART 235	Watercolor Painting I	3
ARTD 100	Graphic Design I	3
ARTI 247	Digital 3D Design and Animation	3
ARTI 248	Digital 3D Design and Sculpture	3
TOTAL UNITS		**36**

INFORMATION TECHNOLOGY (AS, CA)

This program prepares students for employment in information systems applications development in business and industry. The focus is on developing skills in programming languages, Internet, spreadsheets, databases, presentation graphics, word processing, and database design. See a counselor for additional university transfer requirements in this major.

A.S. DEGREE MAJOR OR
CERTIFICATE OF ACHIEVEMENT

Program Requirements		Units
CSIT 105	Computer Concepts and Applications	3
CSIT 125	Computer Information Systems	3
CSIT 150	Introduction to SQL	3
CSIT 180	C# Programming I	3
CSIT 280	C# Programming II	3
CSWB 110	Web Site Development with HTML5/CSS3	3
CSWB 120	JavaScript and jQuery	3
CSWB 150	PHP with MySQL	3
	or	
CSIT 175	Python Programming	3
CSIT 170	Visual Basic I	3

Electives (Select 1 course)

CSWB 135	Advanced JavaScript and Mobile Apps	3
CSNT 111	Networking Fundamentals	3
TOTAL UNITS		**30**

INSIDE WIREMAN (AS, CA)

A five-year apprenticeship program. Study of technical course development and delivery techniques for the electrical trade, utilizing classroom-proven techniques. The student will familiarize him/herself with classroom management, testing and assessment techniques, curriculum development and material presentation based on industry-standard and college level instructional methodologies. Applications for this program should be directed to the San Diego Electrical Training Trust, 4675 Viewridge Avenue, San Diego, CA 92123. Telephone (858) 569-6633, ext. 111.

A.S. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT

Program Requirements		Units
AP IW 701	Introduction to the Electrical Trade	4
AP IW 702	Electrical Theory, Practice and Blueprint Reading	4
AP IW 703	Inductance and Capacitance Theory	4
AP IW 704	Transformer, Motors, and Motor Controls	4
AP IW 705	Special Electrical Systems	4
AP IW 706	Specialized Electrical Applications	4
AP WE 713	Electrician Work Experience	16

Electives (Select 16 units)		
AP IW 713	Electrical Project Supervision	4
AP IW 714	Electrical Certification Preparation	4
AP IW 716	Photovoltaics	4
AP IW 725	Building Automation Systems	4
AP IW 726	Electrical Construction Practices	4
AP IW 797	Inside Wireman Topics	2 - 4
TOTAL UNITS		**56**

INTELLIGENT TRANSPORTATION SYSTEMS APPRENTICESHIP (AS,CA)

Intelligent Transportation Systems (ITS) are advanced applications which aim to provide innovative services relating to different modes of transport and traffic management. It enables various users to be better informed and make safer, more coordinated, and 'smarter' use of transport networks. ITS systems vary in technology from basic management systems such as car navigation; traffic signal control systems; container management systems; variable message signs; automatic number plate recognition or speed cameras to monitor applications, such as security CCTV systems; and to more advanced applications that integrate live data and feedback from a number of other sources, such as parking guidance and information systems; weather information; and bridge de-icing (US deicing) systems. This apprenticeship program has been developed to educate students in all aspects of this emerging market. Students will begin by learning the basic fundamentals of these systems with emphases on real world applications through both classroom and hands on lab instruction. As students' progress through the program they will be introduced to more complex concepts that will prepare them with the skills necessary to gain employment in this growth sector. Students will be exposed to fundamental electrical concepts such as Direct and Alternating Current Systems, Blueprints, Fiber Optics, Closed Circuit Television, Traffic Signal Systems, Traffic Control and Networking Systems. They will also learn the skills necessary to design, construct, install, and troubleshoot these complex systems. After the Four year program is complete they will be equipped to enter their career as an Intelligent Transportation Systems Specialist.

A.S. DEGREE MAJOR OR CERT. ACHIEVEMENT

Program Requirements		Units
AP IT 701	Introduction to the Intelligent Transportation Systems Trade and Industry	4
AP IT 702	Electrical Theory, Applications and Blueprint Reading	4
AP IT 703	DC circuits, Codeology, and Underground Installations	4
AP IT 704	AC Theory, Blueprints Maintenance and Trouble shooting	4
AP IW 705	Special Electrical Systems	4
AP IT 706	Alternative Energy Systems, CCTV , Fiber Optics	4
AP IT 707	Motor Control, Safety Training and Certifications	4
AP IT 708	Electrical Certification and Project Supervision	4
AP WE 713	Electrician Work Experience	16
TOTAL UNITS:		**48**

INTERACTIVE MEDIA DESIGN: EMPHASIS IN 3D MODELING AND ANIMATION (AS, CA)

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.S. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT

Program Requirements		Units
ARTI 100	Concept Sketching	3
ARTI 246	Digital 3D Design and Modeling	3
ARTI 247	Digital 3D Design and Animation	3
GCIP 141	Digital Imaging/Photoshop II	3
GCMW 204	Motion Graphics for Multimedia	3
GCMW 206	Motion Graphics Production and Compositing	3
ART 120	Foundations of Life Drawing	3
GCMW 206	Motion Graphics Production and Compositing	3
ARTI 248	Digital 3D Design and Sculpture	3

Electives (Select two courses)		
GCIP 140	Digital Imaging/Photoshop I	3
GCIP 240	Digital Imaging/Photoshop III	3
GCMW 100	History of Multimedia	3
ART 121	Intermediate Life Drawing	3
ARTD 220	Motion Design	3
TOTAL UNITS		**30**

INTERACTIVE MEDIA DESIGN: EMPHASIS IN MULTIMEDIA DESIGN (AS,CA)

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.S. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT

Program Requirements

ARTD 100	Graphic Design I	3
ARTD 220	Motion Design	3
ARTI 247	Digital 3D Design and Animation	3
GC 115	Graphics and Media: A Multicultural Perspective	3
GCIP 240	Digital Imaging/Photoshop III	3
GCMW 101	Multimedia I	3
GCMW 201	Multimedia II	3
GCMW 204	Motion Graphics for Multimedia	3

Electives (Select two courses)

ART 197G	Topics in Art-Computer Art	3
ARTD 150	Digital Concepts and Techniques in Art	3
ARTI 246	Digital 3D Design and Modeling	3
DBA 170/		
CINE 170	Introduction to Video Editing	3
DT 180 3D	Studio Max - Introduction to 3D Modeling and Animation	3
DT 182 3D	Studio Max-Advanced 3D Modeling and Animation	3
GC 100	Graphic Communications	3
GCIP 140	Digital Imaging/Photoshop I	3
GCIP 152	Digital Publishing/Illustrator I	3
GCMW 100	History of Multimedia	3
GCMW 102	Web Page Layout I	3
MUS 180	Computer Music I	3
TOTAL UNITS:		**30**

INTERIOR DESIGN (CA)

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

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

CERTIFICATE OF ACHIEVEMENT

Program Requirements		**Units**
ID 100	Interior Design	3
ARCH 105	Basic Architectural Drafting	3
ID 125	Presentation Methods in Interior Design	3 - 4
ID/ARCH 150	Beginning Computer Aided Drafting	3
ID 105	Materials and Resources	3
ID 170	Space Planning	3
ID 145	Kitchen and Bath Design	3
ID 151	Advanced Computer Aided Drafting for Designers	3
ID 141	Commercial Interior Design	3
TOTAL UNITS		**27 - 28**

INTERIOR DESIGN (AS)

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

A.S. DEGREE MAJOR

Program Requirements
First Semester
Third Semester

ID 100	Interior Design	3
ARCH 105	Basic Architectural Drafting	3
ID 125	Presentation Methods in Interior Design	3 - 4
ID/ARCH 150	Beginning Computer Aided Drafting	3
ID 105	Materials and Resources	3
ID 170	Space Planning	3
ID 145	Kitchen and Bath Design	3
ID 151	Advanced Computer Aided Drafting for Designers	3
ID 141	Commercial Interior Design	3
TOTAL UNITS		**30**

Recommended Electives: ART 100, 102, CI 100, ID 145, 151

INTERSEGMENTAL GENERAL EDUCATION TRANSFER CURRICULUM (CA)

Students who complete the Intersegmental General Education Transfer Curriculum (IGETC) transfer pattern, commonly referred to at Palomar as the "green sheet," may be awarded a Certificate of Achievement. Completion of the IGETC pattern satisfies the lower-division general education requirements for the UC and/or CSU system.

Although this certificate recognizes completion of the lower-division general education requirements, it does not guarantee admission into the UC or CSU system.

CERTIFICATE OF ACHIEVEMENT

For a list of the approved courses for this program, please refer to the "Intersegmental General Education Transfer Curriculum Requirements" listed in Section 7 (green pages) of the Catalog. Contact the Counseling Services Department with questions or for additional information.

Program Requirements	**Units**
Area 1: English Communication	6 - 9
Area 2: Mathematical Concepts and Quantitative Reasoning	3
Area 3: Arts and Humanities	9
Area 4: Social and Behavioral Sciences	9
Area 5: Physical and Biological Sciences	7 - 9
Area 6: Language Other Than English - UC Requirement Only	0 - 3
MINIMUM UNITS	**37**

ITALIAN (AA, CA)

This degree will provide required course work for students majoring or minoring in Italian. In addition, completing the course work will meet the foreign language competency requirements at many colleges and universities. It will also provide instruction for students seeking foreign language skills for personal development.

A.A. DEGREE MAJOR OR
CERTIFICATE OF ACHIEVEMENT

Program Requirements		Units
ITAL 101	Italian I	5
ITAL 102	Italian II	5
ITAL 201	Italian III	5
ITAL 202	Italian IV	5
TOTAL UNITS		**20**

JAPANESE (AA, CA)

This degree will provide required course work for students majoring or minoring in Japanese. In addition, completing the course work will meet the foreign language competency requirements at many colleges and universities. Students may receive humanities credit on general education patterns for both the CSU and UC systems. It will also provide instruction for students seeking foreign language skills for personal development.

A.A. DEGREE MAJOR OR
CERTIFICATE OF ACHIEVEMENT

Program Requirements		Units
JAPN 101	Japanese I	5
JAPN 102	Japanese II	5
JAPN 201	Japanese III	5
JAPN 202	Japanese IV	5
JAPN 130	Introduction of Japanese Culture and Literature	3
TOTAL UNITS		**23**

JOURNALISM (AA-T)

 The Associate in Arts in Journalism for Transfer teaches students the methods and techniques for gathering, processing and delivering news. It prepares students for careers in print and multimedia journalism. It includes instruction in news writing and editing, reporting, multimedia story production, and professional standards and ethics.

Careers in this field include book editor, copywriter, film critic, foreign correspondent, freelance writer, online editor, multimedia story producer, journalist, magazine editor, news anchor, newspaper editor, publicist, sportswriter and technical writer. This major may also lead to many other careers. For additional possibilities, visit the Career Center.

Pursuant to SB 1440, the following completion requirements must be met:

(1) Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:

  (A) The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements.

  (B) A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.

(2) Obtainment of a minimum grade point average of 2.0."

ADTs also require that students must earn a C or better in all courses required for the major or area of emphasis. A "P" (Pass) grade is also an acceptable grade for courses in the major if the course is taken on a Pass/No Pass basis.

AA-T TRANSFER MAJOR

Program Requirements		
COMM 100	Introduction to Mass Communication	3
JOUR 101	Multimedia Writing and Reporting	3
JOUR 105	Multimedia News Writing and Production	3

List A - Select 1 course

COMM 104	Introduction to Public Relations	3
JOUR 130	Blogging	3
JOUR/PHOT 140	Photojournalism	3
JOUR 205	Intermediate Multimedia News Writing and Production	3

List B - Select 2 courses

ECON 101	Principles of Economics (Macro)	3
	or	
ECON 102	Principles of Economics (Micro)	3
ENG 202	Critical Thinking and Composition	4
MATH 120	Elementary Statistics	4
PHIL 200	Critical Thinking	3
PHOT 100	Elementary Film and Darkroom Photography	3
*SPCH 105	Beginning Argumentation and Debate	3
TOTAL UNITS		**18 - 19**

*Course is required major preparation at CSU San Marcos (CSUSM). Students planning to transfer to CSUSM are advised to select these courses to complete this degree. For more information on this major at CSUSM, please refer to the articulation agreement at ASSIST.ORG.

KINESIOLOGY (AA)

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		
HE104/EME 100	Emergency Medical Responder	3
HE/NUTR 165	Fundamentals of Nutrition	3
KINE 100	Introduction to Kinesiology	3
KINE 176	Athletic Training	3
PSYC 100	Introduction to Psychology	3
BIOL 210	Anatomy	4
BIOL 211	Physiology	4
CHEM 110	General Chemistry	3
	and	
CHEM 110L	General Chemistry Laboratory	2

Group I - Select a minimum of 1 course from 2 separate disciplines (minimum 7 units)

MATH 120	Elementary Statistics	4
	or	
MATH 135	Precalculus Mathematics	5
BIOL 100	General Biology	4
	or	
BIOL101	General Biology (Lecture)	3
	and	
BIOL101L	General Biology (Laboratory)	1
NUTR185	Science of Human Nutrition	3

Group II - Fitness Courses: Select 1 course

HE100L	Health Performance Lab	1 - 2
KINE128A	Wellness Modalities- Cardio	1 - 2
KINE128B	Wellness Modalities-Muscular	1 - 2
KINE128C	Wellness Modalities- Functional	1 - 2
KINE128D	Wellness Modalities- Periodization	1 - 2
KINE150A	Beginning Weight Training	1 - 2
KINE150B	Intermediate Weight Training-Strength Training for Total Fitness	1 - 2
KINE150C	Advanced Weight Training-Power Lifting and Plyometrics Training	1 - 2

Group III - Sport Courses: select 1 course (An ACS course in these sports may be substituted for one)

KINE 117A	Beginning Golf: Techniques and Analysis	1 - 2
KINE 117B	Intermediate Golf: Techniques and Analysis	1 – 2.5
KINE 117C	Advanced Golf: Techniques and Analysis	1 - 2
KINE 135A	Beginning Swimming	1 - 2
KINE 135B	Intermediate Swimming	1 - 2
KINE 135C	Advanced Swimming	1 - 2
KINE 140A	Beginning Tennis: Techniques and Analysis	1 - 2
KINE 140B	Intermediate Tennis: Techniques and Analysis	1 - 2.5
KINE 140C	Advanced Tennis: Techniques and Analysis	1 - 2
KINE 166A	Beginning Basketball	1 - 2
KINE 166B	Intermediate Basketball	1 - 2
KINE 166C	Advanced Basketball	1 - 2
KINE 168A	Beginning Soccer	1 - 2
KINE 168B	Intermediate Soccer	1 - 2
KINE 168C	Advanced Soccer	1 - 2
TOTAL UNITS		**37 - 41.5**

KINESIOLOGY (AA-T)

The Associate in Arts in Kinesiology for Transfer degree is designed to prepare students for a seamless transfer into the CSU system to complete a baccalaureate degree in Kinesiology or similar major. A baccalaureate degree prepares students for entry into an extraordinary number of academic studies designed to prepare students to be leaders in the fields of physical activity, health, injury and disease prevention and treatment. Students who complete a Kinesiology baccalaureate degree will be prepared for a wide variety of career opportunities in such areas as education, fitness, health fitness medicine, health fitness rehabilitation, allied health and wellness, recreation and leisure, and sports related careers.

Pursuant to SB1440, the following completion requirements must be met:

"(1) Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:

(A) The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements.

(B) A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.

(2) Obtainment of a minimum grade point average of 2.0."

ADTs also require that students must earn a C or better in all courses required for the major or area of emphasis. A "P" (Pass) grade is also an acceptable grade for courses in the major if the course is taken on a Pass/No Pass basis.

AA-T TRANSFER MAJOR

Program Requirements

KINE 100	Introduction to Kinesiology	3
BIOL 210	Anatomy	4
BIOL 211	Physiology	4

Select a minimum of one course from three of the four areas below:

Area One: Individual Sports

KINE 117A	Beginning Golf: Techniques and Analysis	1
KINE 140A	Beginning Tennis: Techniques and Analysis	1
KINE 140B	Intermediate Tennis: Techniques and Analysis	1
KINE 140C	Advanced Tennis: Techniques and Analysis	1

Area Two: Aquatics

KINE 135A	Beginning Swimming	1

Area Three: Team Sports

KINE 155A	Beginning Volleyball: Techniques and Analysis	1
KINE 155B	Intermediate Volleyball: Techniques and Analysis	1
KINE 155C	Advanced Volleyball: Techniques and Analysis	1
KINE 166A	Beginning Basketball	1
KINE 168A	Beginning Soccer	1

Area Four: Fitness

KINE 150A	Beginning Weight Training	1
KINE 150B	Intermediate Weight Training-Strength Training for Total Fitness	1

List A (Select two courses, 6 units)

MATH 120	Elementary Statistics	4
	or	
PSYC/SOC 205	Statistics for the Behavioral Sciences	4
BIOL 100	General Biology	4
	or	
BIOL 101	General Biology (Lecture)	3
	and	
BIOL 101L	Introduction Biology: General Biology (Laboratory)	1
	or	
BIOL 105	Introductory Biology: Human Emphasis	4
CHEM 110	General Chemistry	3
	and	
CHEM 110L	General Chemistry Laboratory	2
HE 104/ EME 100	Emergency Medical Responder	3
PHYS 120	General Physics	4
	or	
PHYS 230	Principles of Physics	5
TOTAL UNITS		**21 - 24**

LATHE TURNING TECHNOLOGY (AS, CA)

This program prepares students to make a living as a wood turner. All aspects of turning will be explored such as making tools and household objects, period and studio furniture applications, architectural applications, vessels and hollow forms. Basic and advanced tool use, application and sharpening will be included. Students will be able design and fabricate turned period furniture parts, contemporary furniture parts, and custom furniture parts. Students will be able to design and fabricate functional items such as tool handles, platters vessels, bowls, as well as similar studio art pieces. Students will also be able to design a line of turned pieces and be able to market pieces in shows, on line and in galleries.

A.S. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT

Program Requirements

CFT 100	Fundamentals of Woodworking	4
CFT 108	Business Woodworking	2
CFT 118	Furniture Design Development	2
	or	
CFT 153	Studio Furniture Design I	2
CFT 176	The Lathe - An Introduction to Woodturning	2
CFT 177	Lathe II - Intermediate Turning	2
CFT 178	Lathe III - Advanced Turning	2
CFT 195	Finishing Technology/Touch-Up and Repair	2

Electives (Select 2 units)

CFT 105	Machine Woodworking/Furniture	4
CFT 143	Decorative Box Making	2
CFT 155	Classic American Chair Designs	2
CFT 185	Machine Tool Set-Up and Maintenance	2
TOTAL UNITS		**18**

LEGAL SUPPORT ASSISTANT (CP)

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 105	Legal Communications and Methods	3
LS 110	Computer Skills for the Legal Profession	2
LS/POSC 121*	Introduction to Law	3
LS 145	Legal Ethics	3
BUS 125	Business English	3
BUS 165	Beginning Keyboard	2
	or	
Demonstrate the ability to type 35 word per minute		
TOTAL UNITS		**14 - 16**

Recommended Electives: BUS 173

LIBRARY AND INFORMATION TECHNOLOGY (AS, CA)

Provides training for students desiring employment as library technicians, as identified in occupational classification resources. This includes library support staff positions such as library technical assistants, library media technicians, library paraprofessionals and more. Employment growth is steady and training for those reentering the labor market is a continuing need.

A.S. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT

Program Requirements		**Units**
LT 100	Introduction to Libraries/Information Services	3
LT 105	Research Skills & Informed Learning	3
LT 110	Library Operational Skills/Technical Services	3
LT 115	Library Operational Skills/Public Services	3
LT 120	Information Sources and Services/Reference	3
LT 130	Library Media and Technology	3
LT 140	Library Services for Children and Young Adults	3
CSIT 105	Computer Concepts and Applications	3
TOTAL UNITS		**24**

MANAGEMENT INFORMATION SYSTEMS (AS, CA)

Management Information Systems (MIS) is a series of courses that bind both business and technology to produce quality information for an organization. MIS professionals focus on the business side of Information Systems (IS). An MIS professional utilizes computer information to facilitate the decision-making of managers.

Key areas of focus in this degree are: Business Communications; Accounting; Economics; Business Law; Statistics; Mathematics; Computer Information Systems; Computer Programming; Systems Analysis and Design, Database Management Systems, Data Communications, and Security.

A.S. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT

Program Requirements		**Units**
CSIT 105	Computer Concepts and Applications	3
CSIT 125	Computer Information Systems	3
BUS 117	Legal Environment of Business	3
BUS 204	Quantitative Business Analysis	4
	or	
MATH 120	Elementary Statistics	4
	or	
PSYC/SOC 205	Statistics for the Behavioral Sciences	4
BUS 205	Business Communication	3
MATH 130	Calculus for Business and the Social Sciences	4
ACCT 201	Financial Accounting	4
ACCT 202	Managerial Accounting	4
ECON 101	Principles of Economics (Macro)	3
ECON 102	Principles of Economics (Micro)	3

Group Two (Select 1 course)

CSCI 112	Programming Fundamentals	4
CSIT 145	Introduction to Programming Using Java	3
CSIT 160	Oracle Database Management Systems	3
CSIT 180	C# Programming	3
CSNT 111	Networking Fundamentals	3
CSWB 110	Web Site Development with HTML5/CSS3	3
TOTAL UNITS		**37 - 38**

MATHEMATICS (AS-T)

The Associate in Science in Mathematics for Transfer provides students the opportunity to meet lower division transfer requirements for a major in Mathematics. It provides the foundation for studying Physics, Engineering, the Physical, Biological and Health Sciences, Economics, Business, Computer Science, Statistics, and many others.

AS-T TRANSFER MAJOR

Pursuant to SB1440, the following completion requirements must be met:

"(1) Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:

   (A) The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education - Breadth Requirements.
   (B) A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.

  (2) Obtainment of a minimum grade point average of 2.0."

ADTs also require that students must earn a C or better in all courses required for the major or area of emphasis. A "P" (Pass) grade is also an acceptable grade for courses in the major if the course is taken on a Pass/No Pass basis.

Program Requirements

*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

List A (Choose 1 course)

MATH 200	Introduction to Linear Algebra	3
MATH 206	Calculus with Differential Equations	4

List B (Choose 1 course not previously taken)

MATH 120	Elementary Statistics	4
MATH 200	Introduction to Linear Algebra	3
MATH 206	Calculus with Differential Equations	4
MATH 245	Discrete Mathematics	3
*PHYS 230	Principles of Physics	5
TOTAL UNITS		**19 - 22**

*Course is required major preparation at CSU San Marcos (CSUSM). Students planning to transfer to CSUSM are advised to select these courses to complete this degree. For more information on this major at CSUSM, please refer to the articulation agreement at ASSIST.ORG.

MATHEMATICS (AS)

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.S. 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	Elementary Statistics	
	or	
MATH 200	Introduction to Linear Algebra	
	or	
MATH 206	Calculus with Differential Equations	4
MATH/		
CSCI 146	FORTRAN 90 for Mathematics and Science	3
	or	
CSCI 112	Programming Fundamentals I	4
TOTAL UNITS		**19 - 21**

Recommended Electives: PHYS 230, 231, 232; CHEM 110, 115; MATH 245

MECHANICAL ENGINEERING DRAFTING AND DESIGN TECHNOLOGY (AS, CA)

The Mechanical Engineering Drafting and Design Technology Program prepares students with the computer and technical drafting skills necessary to form a foundation in Computer-Aided Drafting and Design (CADD) as it applies to the mechanical engineering field. The 2D fundamentals of this program include drawing, modifying, and annotating (creating text, dimensioning, tolerancing, leaders, tables and title blocks) of basic objects, user interface customization, file management, and plotting/printing. Students will learn plane geometry, orthographic projection, and auxiliary views.

Students will study blocks, libraries, the design center and customize tool palettes. Design intent and layout will be emphasized throughout the process. 3D modeling will include wireframes, surfaces, meshes and solids. This program will encompass core features of parts, building assemblies and creating mechanized assemblies.

A.S. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT

Kinematic (motion) feasibility studies of assemblies will be covered. Technical mathematics and a basic understanding of industrial materials and their properties for manufacturing will be taught. Completion of this program prepares students for entry level drafting employment in the mechanical engineering drafting and design field.

Program Requirements		Units
DT/ENGR 101	AutoCAD I	3
DT/ENGR 102	AutoCAD II	3
DT/ENGR 110	Technical Drafting I with AutoCAD	3
DT/ENGR 111	Technical Drafting II with AutoCAD	3
DT/ENGR 103	SolidWorks I	3
	or	
DT 114	Creo I	3
DT/ENGR 104	SolidWorks II	3
	or	
DT 115	Creo II	3
DT/ENGR/		
WELD 117	Blueprint Reading and Geometric Dimensioning and Tolerance	3
MACH 228	Metallurgy and Industrial Materials	3
IT/WELD 108	Technical Mathematics	3
TOTAL UNITS		**27**

MEDICAL OFFICE SPECIALIST (AS, CA)

Provides specific front-office skills for an entry-level position in a medical-related facility.

A.S. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT

Program Requirements		Units
BUS 80	Medical Terminology and Anatomy	4
BUS 82	Medical Insurance Billing and Coding	3
BUS 84	Healthcare Writing Techniques	2
BUS 86	Electronic Health Record Applications	2
BUS 88	Medical Office Administration	3
BUS 166	Intermediate Keyboarding	2
CE 150	Cooperative Education Internship	2 - 3
Demonstrate the ability to type 45 net words per minute for five minutes with 5 errors or less		
TOTAL UNITS		**18 - 19**

MILITARY LEADERSHIP (AS,CA)

Designed for all Marine Corps Sergeants regardless of military occupational specialty (MOS). Supports unit commanders and builds the necessary leadership, communication and warfighting skills to allow students to perform the duties of small unit leaders. Provides leadership skills including formulating policies, managing daily operations, and planning the use of materials and human resources in public or private sector organizations in a wide range of sectors.

A.S. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT

Program Requirements

MIL 100	Military Leadership Communications	3
MIL 101	Military Warfighting Philosophy	3
MIL 102	Sustaining the Transformation: Marine Corps Customs and Traditions	3
MIL 103	Military Leadership Philosophy	3

Military Leadership Work Experience (6 units required)

MIL 199	Military Leadership Work Experience	0.5 - 6
TOTAL UNITS:		**18**

MULTIMEDIA JOURNALISM (AS, CA)

The Journalism program is designed to teach students about working in multiple media genres and prepares them to become critical producers and consumers of mass media content. Students learn how to report, write, design and work in print, web, video, and social media. The students also learn about media ethics and responsibility. The program goal is to make students better able to understand media institutions and how to add their voices to the process of shaping their cultural environment.

A.S. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT

Program Requirements		Units
JOUR 101	Multimedia Writing and Reporting	3
JOUR 105	Multimedia News Writing and Production	3
JOUR 110L	Multimedia Journalism Laboratory	1
JOUR 205	Intermediate Multimedia News Writing and Production	3
JOUR 210	Advanced Multimedia News Production	3
JOUR 215	Advanced Multimedia News Editing	3
	or	
JOUR/PHOT 140	Photojournalism	3
COMM 100	Introduction to Mass Communication	3
COMM 104	Introduction to Public Relations	3
COMM 105	Race, Gender and Media Effects	3
POSC 101	Introduction to Politics and American Political Institutions	3
TOTAL UNITS		**28**

Recommended Electives: JOUR 103, JOUR 295
Note: JOUR 105, 205, 210, and 215 may not be taken concurrently.

MUSIC (AA-T)

The Associate in Art in Music for Transfer prepares students to transfer to California State University campuses that offer bachelor's degrees in Music. The Music AA-T degree prepares students to demonstrate competence and discipline in the study of music in all of its facets as well as read and audiate music. Completers will demonstrate proficiency in ensemble and solo performance skills. While a baccalaureate degree is recommended for a possible career in music production, performance, and music education, completion of this curriculum will demonstrate commitment to the study of Music in practice and in theory and will provide required preparation for upper-division work leading to a Bachelor of Arts Degree in Music at a University.

Pursuant to SB1440, the following completion requirements must be met:

(1) Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:

(A) The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements. (Please note: This degree may only be completed using the IGETC GE pattern.)

(B) A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.

(2) Obtainment of a minimum grade point average of 2.0.

ADTs also require that students must earn a C or better in all courses required for the major or area of emphasis. A "P" (Pass) grade is also an acceptable grade for courses in the major if the course is taken on a Pass/No Pass basis.

AA-T TRANSFER MAJOR

Program Requirements		Units
MUS 105	Music Theory I	3
	and	
MUS 110	Music Skills I	1
MUS 106	Music Theory II	3
	and	
MUS 111	Music Skills II	1
MUS 210	Advanced Harmony	3
	and	
MUS 215	Music Skills III	1
MUS 211	Counterpoint	3
	and	
MUS 216	Music Skills IV	1
Applied Music (Must take two times for a total of two units)		
MUS 220	Applied Music	2

Ensembles (Select 4 units)

MUS 148	Palomar Chorale	1
MUS 149	Spectrum Pop/Jazz Singers	1
MUS 151	Concert Band	1
MUS 152	Jazz Ensemble	1
MUS 155	Chamber Ensemble - Brass	1
MUS 157	Guitar Ensembles	1
MUS 158	Chamber Singers	.5 - 1
MUS 172	Repertory Jazz Ensemble	1
MUS 184	Electronic Ensemble	1
MUS 198	Palomar Symphony Orchestra	.5 - 1
TOTAL UNITS		**22**

MUSIC (AA)

The Music Associate in Arts Degree prepares students for transfer to a California State University, University of California, private university or conservatory that offers a Bachelor of Music Degree or Bachelor of Arts Degree in Music.

A.A. DEGREE MAJOR

Program Requirements		Units
MUS 100	Music Appreciation	3
MUS 105	Music Theory I	3
MUS 106	Music Theory II	3
MUS 110	Music Skills I	1
MUS 111	Music Skills II	1
MUS 180	Computer Music I	3
MUS 210	Advanced Harmony	3
MUS 211	Counterpoint	3
MUS 215	Music Skills III	1
MUS 216	Music Skills IV	1

Piano Proficiency (Select a minimum of .5 - 2.5 units)

MUS 115	Basic Keyboard I	.5
MUS 116	Accelerated Basic Keyboard	1
MUS 117	Basic Keyboard II	.5
MUS 119	Piano Skills I	.5
MUS 224	Introduction to Jazz Piano	.5
MUS 225	Piano Skills II	.5

Performance Course List
(See Emphasis for minimum unit requirements)

MUS 130	Fundamental Vocal Skills	.5
MUS 131	Vocal Literature and Performance	.5
MUS 134	Palomar Women's Chorus	1
MUS/DNCE 137	Cuban and Brazilian Drumming I	.5 - 1
MUS/DNCE 138	Cuban and Brazilian Drumming II	.5 - 1
MUS 148	Palomar Chorale	1
MUS 149	Spectrum Pop/Jazz Singers	1
MUS 150	Musical Theatre - Vocal	.5 - 1
MUS 151	Concert Band	1
MUS 152	Jazz Ensemble	1
MUS 155	Chamber Ensemble - Brass	1
MUS 157	Guitar Ensembles	1
MUS 158	Chamber Singers	.5 - 1
MUS 159	Musical Theatre Orchestra	.5 - 1
MUS 161	Summer Concert Band	.5
MUS/DNCE/ TA 173	Musical Theatre Scenes I	1
MUS 172	Repertory Jazz Ensemble	1
MUS/DNCE/ TA 173	Musical Theatre Scenes	1
MUS 175	Beginning Guitar	.5
MUS 176	Intermediate Guitar	.5
MUS 178	Classical Guitar	1
MUS 179	Beginning Flamenco Guitar	.5
MUS 184	Electronic Ensemble	1
MUS 198	Palomar Symphony Orchestra	.5 - 1

MUS 223	Premier Chamber Ensembles	1
MUS 250	Choral Conducting	1
MUS 251	Master Class in Keyboard Literature, Analysis and Performance	.5 - 3

Emphasis in Performance (Students must complete four semesters of MUS 220 and 222, plus a minimum of 4 units from the Performance Course List.)

MUS 220	Applied Music	1
MUS 222	Performance Studies	.5

Emphasis in Composition and Theory (Students must take MUS 184 for three semesters, and MUS 220 and 222 for two semesters, plus a minimum of 2 units from the Performance Course List.)

MUS 181	Computer Music II	3
MUS 184	Electronic Ensemble	1
MUS 187	Computer Music Composition	1
MUS 220	Applied Music	1
MUS 222	Performance Studies	.5

Emphasis in General Music (Select 6 units, plus a minimum of 4 units from the Performance Course List.)

MUS 101	Survey of 20th Century Music	3
MUS 102	Introduction to Jazz	3
MUS/ENTT/ TA 114	Advanced Sound Reinforcement	1.5 - 2
MUS 130	Fundamental Vocal Skills	.5
MUS 131	Vocal Literature and Performance	.5
MUS 169	History of Rock Music	3
MUS 171	World Music	3
MUS 175	Beginning Guitar	.5
MUS 176	Intermediate Guitar	.5
MUS 181	Computer Music II	3
MUS 184	Electronic Ensemble	1
MUS 187	Computer Music Composition	1
TOTAL UNITS		**32.5 - 35**

Recommended Elective: DNCE/MUS/TA 173

MUSICAL THEATRE PREPARATION (CA)

The Certificate in Musical Theatre Preparation prepares the students for auditions and performances in the Musical Theatre Genre. This certificate provides the students with the basic and continuing skills necessary to for involvement in community theatre, theme park, cruise ship, and a range of musical theatre opportunities.

Program Requirements

DNCE/MUS/ TA 173	Musical Theatre Scenes	1
DNCE/MUS/ TA 174	Musical Theatre Scenes II	3
DNCE 149	Afro-Cuban/Brazilian Dance I	1
DNCE 150	Afro-Cuban/Brazilian Dance II	1
DNCE 115	Ballet I	1
DNCE 116	Ballet II	1
DNCE 131	Tap II	1
DNCE 151	Latin Social Dance I	1
DNCE 120	Jazz Technique I	1
TA 115	Acting I	3
MUS 130	Fundamental Vocal Skills	.5
TA 191A	Rehearsal and Performance I	2
MUS 131	Vocal Literature and Performance	.5
DNCE 130	Tap I	1
TOTAL UNITS		**18**

NEW MEDIA COMPOSITING, AUTHORING AND DISTRIBUTION (AS, CA)

This program is directed at alternative methods of digital video compilation and distribution. Students will learn techniques and software to compile and composite digital video for release on mobile devices, screen media and Internet formats.

A.S. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT

Program Requirements		Units
GCIP 240	Digital Imaging/Photoshop III	3
GCIP 249	Page Layout and Design II	3
GCMW 101	Multimedia I	3
GCMW 165	Digital Video Design	3
GCMW 201	Multimedia II	3
GCMW 204	Motion Graphics for Multimedia	3
GCMW 205	Digital Video for Multimedia	3

Electives (select 3 units)		
ARTD 220	Motion Design	3
ARTI 246	Digital 3D Design and Modeling	3
ARTI 247	Digital 3D Design and Animation	3
DBA 230	Digital Audio with Pro Tools	3
CINE/DBA 270	Digital Video Editing	3
GCIP 141	Digital Imaging/Photoshop II	3
GCIP 168	Digital Imaging with Drones	3
GCMW 112	Mobile Devices/Web Page Layout	2
GCMW 115	Web Page Layout/WordPress	2
GCMW 202	Web Page Layout II	3
TOTAL UNITS		**30**

ASSOCIATE IN ARTS (AA) IN NURSING

Requirements for an AA in Nursing

MATH Any course numbered 56 and above, except math topics, or an appropriate score on an approved math exam		0 - 4
BIOL 212	Fundamentals of Microbiology	4
BIOL 210	Anatomy	4
BIOL 211	Physiology	4

Semester I		
NURS 117	Nursing I	9
NURS 103	Nursing Foundation I	2

Semester II		
NURS 118	Nursing II	9
NURS 203	Nursing Foundation II	1

Semester III		
NURS 217	Nursing III	9

Semester IV		
NURS 218	Nursing IV	9

Additional Related Support Courses		
ENG 100*	English Composition	4
	or	
ESL 110	College Composition for Non-Native Speakers	4
HUM Any approved GE Area C course		3
PSYC 100, 105, 110, 115, 120, 125, or 130		3
SOC 100, 105, 110, 125, 130,135, or 145		3
SPCH 100, 105, 120 or 115		3

One approved pair of American History & Institutions courses or an appropriate score on an approved American History & Institutions exam		0 - 6

The Multicultural Course requirement is met by completion of NURS 103 and NURS 217, or NURS 110 and NURS 217.   0

The following additional requirements for an Associate in Arts Degree in Nursing are met by completion of the Nursing Curriculum:

Health and Fitness requirement	0
Lifelong Learning and Self-Development requirement	0
TOTAL UNITS	**73 - 77**

*Three semester unit courses accepted from accredited colleges.
Curriculum plan subject to change.
To get credit for any course applicable to an Associate in Arts Degree in Nursing, students must receive a grade of 'C' or better.

AA IN NURSING FOR LVNS

Advanced standing for LVNs is based on the following requirements:
- Hold a valid, active LVN license in the state of California.
- Graduate from an accredited LVN/LPN program.
- Meet all requirements for admission as identified in the College Catalog.
- Successfully complete NURS 110.

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.

Requirements for an AA in Nursing for LVNs

MATH Any course numbered 56 and above, except math topics, or an appropriate score on an approved math exam		0 - 4
NURS 110 LVN-RN Transition		2
BIOL 212	Fundamentals of Microbiology	4
BIOL 210	Anatomy	4
BIOL 211	Physiology	4

Semester I		
NURS 217	Nursing III	9
NURS 203	Nursing Foundation II	1

Semester II		
NURS 218	Nursing IV	9

Additional Related Support Courses		
ENG 100*	English Composition	4
	or	
ESL 110	College Composition for Non-Native Speakers	4
HUM Any approved GE Area C course		3
PSYC 100, 105, 110, 115, 120, 125, or 130		3
SOC 100, 105, 110, 125, 130, 135, or 145		3
SPCH 100, 105, 120 or 115		3

One approved pair of American History & Institutions courses or an appropriate score on an approved American History & Institutions exam		0 - 6

The Multicultural Course requirement is met by completion of NURS 103 and NURS 217, or NURS 110 and NURS 217.   0

The following additional requirements for an Associate in Arts Degree in Nursing are met by completion of the Nursing Curriculum:

Health and Fitness requirement	0
Lifelong Learning and Self-Development requirement	0
TOTAL UNITS	**49 - 59**

*Three semester unit courses accepted from accredited colleges.
Curriculum plan subject to change.
To get credit for any course applicable to an Associate in Arts Degree in Nursing, students must receive a grade of 'C' or better.

When the LVN student has successfully completed the AA in Nursing program, the student will be given credit for previous vocational nursing education equivalent to 18 units.

ASSOCIATE IN SCIENCE (AS) IN NURSING

Requirements for an AS in Nursing

MATH Any course numbered 56 and above, except math topics, or an appropriate score on an approved math exam		0 - 4
BIOL 212	Fundamentals of Microbiology	4
BIOL 210	Anatomy	4
BIOL 211	Physiology	4

Semester I

NURS 117	Nursing I	9
NURS 103	Nursing Foundation I	2

Semester II

NURS 118	Nursing II	9
NURS 203	Nursing Foundation II	1

Semester III

NURS 217	Nursing III	9

Semester IV

NURS 218	Nursing IV	9

Additional Related Support Courses

ENG 100*	English Composition	4
	or	
ESL 110	College Composition for Non-Native Speakers	4
HUM Any approved GE Area C course		3
PSYC 100, 105, 110, 115, 120, 125, or 130		3
SOC 100, 105, 110, 125, 130, 135, or 145		3
SPCH 100, 105, or 115		3

The Multicultural Course requirement is met by completion of NURS 103 and NURS 217, or NURS 110 and NURS 217. 0

The following additional requirements for an Associate in Science Degree in Nursing are met by completion of the Nursing Curriculum:

Health and Fitness requirement	0
Lifelong Learning and Self-Development requirement	0
TOTAL UNITS	**67-71**

*Three semester unit courses accepted from accredited colleges.
Curriculum plan subject to change.
To get credit for any course applicable to an Associate in Science Degree in Nursing, students must receive a grade of 'C' or better.

AS IN NURSING FOR LVNS

Advanced standing for LVNs is based on the following requirements:
- Hold a valid, active LVN license in the state of California.
- Graduate from an accredited LVN/LPN program.
- Meet all requirements for admission as identified in the College Catalog.
- Successfully complete NURS 110.

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.

Requirements for an AS in Nursing for LVNs

MATH Any course numbered 56 and above, except math topics, or an appropriate score on an approved math exam		0 - 4
NURS 110	LVN-RN Transition	2
BIOL 212	Fundamentals of Microbiology	4
BIOL 210	Anatomy	4
BIOL 211	Physiology	4

Semester I

NURS 217	Nursing III	9
NURS 203	Nursing Foundation II	1

Semester II

NURS 218	Nursing IV	9

Additional Related Support Courses

ENG 100*	English Composition	4
	or	
ESL 110	College Composition for Non-Native Speakers	4
HUM Any approved GE Area C course		3
PSYC 100, 105, 110, 115, 120, 125, or 130		3
SOC 100, 105, 110, 125, 130, 135, or 145		3
SPCH 100, 105 or 115		3

The Multicultural Course requirement is met by completion of NURS 103 and NURS 217, or NURS 110 and NURS 217. 0

The following additional requirements for an Associate in Arts Degree in Nursing are met by completion of the Nursing Curriculum:

Health and Fitness requirement	0
Lifelong Learning and Self-Development requirement	0
TOTAL UNITS	**49 - 53**

*Three semester unit courses accepted from accredited colleges.
Curriculum plan subject to change.
To get credit for any course applicable to an Associate in Science Degree in Nursing, students must receive a grade of 'C' or better.

When the LVN student has successfully completed the AS in Nursing program, the student will be given credit for previous vocational nursing education equivalent to 18 units.

Non-Degree 30 Unit Option for LVNs

Students who are LVNs and who are electing the Non-Degree 30 Unit Option are eligible to apply to take the National Council Licensure Examination for Registered Nurses (NCLEX RN) as a NON-DEGREE candidate. If successful, they will be licensed as an RN by the California Board of Registered Nursing. Endorsement of a Non-Degree graduate RN in other states is not guaranteed because these regulations are unique to California. ONCE THE LICENSING EXAM IS TAKEN, STATUS CANNOT BE CHANGED FROM NON-DEGREE TO DEGREE REGARDLESS OF SUBSEQUENT DEGREES EARNED.

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.

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.

Requirements for the Non-Degree 30 Unit Option

BIOL 211	Physiology	4
BIOL 212	Fundatmentals of Microbiology	4
NURS 110	LVN RN Transition	2

Semester I

NURS 217*	Nursing III	9
NURS 203	Nursing Foundations II	1

Semester II

NURS 218	Nursing IV	9
TOTAL UNITS		**29**

A 30 Unit Option student, with additional units in general education, may earn the Associate in Arts Degree in General Studies. Neither an Associate in Arts (AA) nor an Associate of Science (AS) in Nursing will be awarded.

AA or AS Degree in Nursing for Diploma RNs

Upon successful completion of the following requirements, a Diploma RN can be awarded an Associate Degree (AA or AS) in Nursing from Palomar College.

- 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 submit an official transcript of the Diploma Nursing school coursework to the Nursing Education Department at Palomar College. The transcript will also be evaluated by the Palomar College Evaluation Department for GE course approvals.
- 38 of the 39 units required for the Nursing major at Palomar College may be awarded from the Diploma Nursing school.
- One unit in Nursing at Palomar College must be earned by completion of NURS 203, Nursing Foundation II.
- A Diploma Nurse must also meet all Associate Degree (AA or AS) General Education and/or District requirements including a minimum of 12 units which must be completed in residency at Palomar College.

NUTRITION AND DIETETICS (AS-T)

The Associate in Science in Nutrition and Dietetics for Transfer is designed to enhance the well-being of all students by providing them with the tools to demonstrate health promoting behaviors as related to nutrition. The program aims to educate students about the various career options in nutrition, dietetics, food science, and fitness. Instruction methods focus on delivering a high quality education that is evidence-based, engaging, and current to prepare students for the workforce, provide the coursework for transfer and general education, support lifelong learning, improve cultural awareness, and serve diverse populations. The Associate in Science in Nutrition and Dietetics for Transfer (AS-T.) degree provides a seamless path to students who wish to transfer to a CSU campus for Nutrition and Dietetics.

Pursuant to SB1440, the following completion requirements must be met:

1. Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:
(A) The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements.

(B) A minimum of 18 semester units or 27 quarter units in a major or area of emphasis. A as determined by the community college district.

2. Obtainment of a minimum grade point average of 2.0."

ADTs also require that students must earn a C or better in all courses required for the major or area of emphasis. A "P" (Pass) grade is also an acceptable grade for courses in the major if the course is taken on a Pass/No Pass basis.

AS-T TRANSFER MAJOR (18 UNITS OR MORE)

Program Requirements

NUTR/BIOL 185	Science of Human Nutrition	3
CHEM 110	General Chemistry Lecture & Laboratory	5
	and	
CHEM 110L	General Chemistry Laboratory	2
BIOL 212	Fundamentals of Microbiology	4
PSYC 100	Introduction to Psychology	3

List A (Choose 2 courses from the list below)

CHEM 115	General Chemistry	3
	and	
CHEM 115L	General Chemistry Laboratory	2
CHEM 220	Organic Chemistry	5
MATH 120	Elementary Statistics	4
	or	
SOC/PSYC 205	Statistics for the Behavioral Sciences 4	
BIOL 210	Anatomy	4
BIOL 211	Physiology	4

List B

NUTR 100	Introduction to Nutrition and Food Professions	3
TOTAL UNITS		**27 - 30**

PARAMEDIC TRAINING (AS, CA)

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 6 months full-time pre-hospital experience or equivalent 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 OR BIOL 145 with a grade of 'C' or better and EME 175 and EME 175L with a "B" or better.

Prerequisite Courses		Units
EME 106	Emergency Medical Technician (Lecture)	6
EME 106L	Emergency Medical Technician Skills (Laboratory)	1.5
EME 175	Paramedic Preparation (Lecture)	3
EME 175L	Paramedic Preparation Skills (Laboratory)	1
BIOL 145	Introduction to Anatomy and Physiology	3

A.S. 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**
Students must achieve a minimum score of 80% in each of the required courses in order to continue in the program.

EME 206	Introduction to Paramedic Training (Lecture)	5.5
EME 206L	Introduction to Paramedic Training (Laboratory)	1.5
EME 207	Paramedic Medical Training (Lecture)	10
EME 207L	Paramedic Medical Skills (Laboratory)	2
EME 208	Paramedic Trauma Training (Lecture)	4.5
EME 208L	Trauma Skills (Laboratory)	1
EME 209	Paramedic Obstetrical and Pediatric Training (Lecture)	2.5
EME 209L	Paramedic Obstetrical and Pediatric Skills (Laboratory)	1
EME 210	Hospital Clinical Experience	4
EME 211	Clinical Integration I	1.5
EME 212	Clinical Integration II	1.5
EME 215	Field Internship	9
TOTAL UNITS		**44**

Note: EME 220, 223, and/or 224 are to be taken by students who have not satisfactorily met program requirements. The EME Department will determine which course or courses should be taken and the number of hours required to make up the deficiencies.

The Palomar College Paramedic Training Program is accredited by the Commission on Accreditation of Allied Health Education Programs (www.caahep.org) upon the recommendation of the Committee on Accreditation of Educational Programs for the Emergency Medial Services Professions (CoAEMSP). (#600117)

Commission on Accreditation of Allied Health Education Programs
1361 Park Street
Clearwater, FL 33756
727-210-2350
www.caahep.org

PHILOSOPHY (AA-T)

The Associate of Arts in Philosophy for Transfer (AA-T) is designed to provide students an introduction to the major theories and methods of philosophical inquiry in preparation for upper-division course work at the university level. The degree offers the opportunity to gain a broad understanding of the main themes within the history of philosophy while at the same time developing analytical and critical reasoning abilities. Critical thinking is emphasized in all philosophy classes and students can apply their skills of critical thinking to philosophical problems in metaphysics, theory of knowledge, ethics, social and political philosophy and philosophy of religion. The major introduces students to both Western and non-Western philosophical traditions.

Pursuant to SB1440, the following completion requirements must be met:

"(1) Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:

(A) The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements.

(B) A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.

(2) Obtainment of a minimum grade point average of 2.0."

ADTs also require that students must earn a C or better in all courses required for the major or area of emphasis. A "P" (Pass) grade is also an acceptable grade for courses in the major if the course is taken on a Pass/No Pass basis.

AA-T TRANSFER MAJOR

Program Requirements (Select 2 courses)

PHIL 111	Introduction to Philosophy	3
	or	
PHIL 121	Introduction to Ethics	3
	and	
PHIL 116	Introduction to Logic	3
	or	
PHIL 201	Symbolic Logic	3

List A (Select 1 course)
Any course not taken above, or

PHIL 113	Reasoning About Philosophical Issues	3
PHIL 140	History of Ancient Philosophy	3
PHIL 141	History of Modern Philosophy	3
PHIL 142	Contemporary Philosophical Movements	3
PHIL 200	Critical Thinking	3

List B (Select 2 courses)
Any courses not selected from List A, or

PHIL 122	Social and Political Philosophy	3
PHIL 126	Philosophy of Religion	3

List C (Select 1 course)
Any course not selected from List A or B, or

PHIL 114	Asian Philosophies	3
PHIL 125	Philosophy of Human Nature	3
PHIL 250	Philosophy in Literature	3
TOTAL UNITS		**18**

PHOTOGRAPHY (AA, CA)

The Photography Program offers students the opportunity to study photography from beginning to advanced levels. Our courses prepare students in a variety of areas, including fine art, editorial, and commercial photography. The program stresses development of creativity while offering a firm grounding in basic skills. Our students will be prepared for positions in the job market or transfer to a 4 year college to continue their education. Students can earn an Associate in Arts Degree or a Certificate of Achievement in Photography.

A.A. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT

Program Requirements — **Units**

PHOT 120	Digital Photography	3
PHOT 100	Elementary Film and Darkroom Photography	3
	or	
PHOT 124	Introduction to Film and Darkroom for Digital Photographers	3
PHOT 125	History and Criticism of Photography	3
PHOT 130	Digital Darkroom I	3
PHOT/JOUR 140	Photojournalism	3
PHOT 160	Photography: Professional Practices	3
PHOT 209	Photographic Portfolio	3
PHOT 220	Commercial Photography	3
PHOT 225	Photographic Portraiture	3
PHOT 135	Digital Darkroom II	3

Electives (Select a minimum of 6 units)

PHOT 105	Intermediate Black and White Photography	3
PHOT 135	Digital Darkroom II	3
PHOT 145	Advanced Photojournalism	3
PHOT 171	Landscape and Culture	3
PHOT 210	Advanced Black and White Photography	3
PHOT 215	Creative Photography	3
PHOT 216	Alternative Photographic Processes	3
TOTAL UNITS		**36**

PICTORIAL ARTS: PAINTING (AA)

This program is designed to serve as preparation for transfer to a four-year college or university, as well as enable the student to acquire skills in producing marketable fine art for gallery exhibition and commissions, or to enter into the commercial area.

The required courses for this degree transfer as lower division credits into participating CSU programs.

Transfer students are encouraged to consult Assist.org and four-year college or university catalogs for specific requirements, as well as see a Palomar College counselor.

A.A. DEGREE MAJOR

Program Requirements

ART 102	Foundations of Drawing	3
ART 104	Design and Composition	3
ART 105	Three-Dimensional Form and Design	3
ART 165	History of Art I - Survey of Western Art	3
ART 120	Foundations of Life Drawing	3
ART 200	Color Theory	3
ART 220	Introduction to Painting	3
ART 166	History of Art II - Survey of Western Art	3
ART 106	Life Painting	3
ART 235	Watercolor Painting I	3

Electives (select 6 units)

ART 125	Introduction to Portraiture	3
ART 103	Intermediate Drawing	3
ART 121	Intermediate Life Drawing	3
ART 221	Painting	3
ART 236	Watercolor Painting II	3
ARTD 150	Digital Concepts and Techniques in Art	3
ARTI 210	Illustration I - Rendering Techniques	3
ARTI 220	Illustration II, Digital Techniques	3
TOTAL UNITS		**36**

PLASTERER (AS, CA)

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.S. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT

Program Requirements		**Units**
Program Requirements		
AP DL/AP AC/		
AP PL 701	Orientation	1.5
AP DL/AP PL/		
AP AC 702	Safety and Health Certifications	1.5
AP DL/AP PL/		
AP AC 703	Printreading	1.5
AP DL 705/		
AP PL 705	Basic Lathing	1.5
AP PL 706	Basic Plastering	1.5
AP PL 707	Exterior Plastering	1.5
AP PL 708	DOT and Screed Techniques	1.5
AP PL 709	Interior Plastering	1.5
AP PL 710	Finish Applications	1.5
AP PL 711	Ornamental Plastering	1.5
AP PL 713	Theme Plastering	1.5

AP DL/AP PL 715	Exterior Insulation Finish Systems (EIFS)	1.5
AP DL/AP PL 716	Firestop/Fireproofing Procedures	1.5
AP PL 717	Plastering Equipment Application	1.5
AP PL 718	Plastering Equipment	1.5
AP C/AP AC/AP DL/		
AP PL 774	Tool & Equipment Applications	1.5
AP C/AP PL 783	Crew Lead Training	1.5
TOTAL UNITS		**25.5**

POLITICAL SCIENCE (AS-T)

The Associate in Arts for Transfer (AA-T) includes a selection of courses designed to prepare students to transfer to California State University campuses that offer bachelor's degrees in Political Science. The degree prepares students to demonstrate basic understanding of American democracy and the United States Constitution, political thought and ideas, law, as well as global dynamics of international security, political economy and other political systems throughout the world. The degree is ideal for students who plan to transfer for further study to pursue a baccalaureate degree in political science.

Pursuant to SB1440, the following Associate Degree for Transfer completion requirements must be met:

(1) Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:

(A) The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education (CSUGE) – Breadth Requirements.

(B) A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.

(2) Obtainment of a minimum grade point average of 2.0.

ADTs also require that students must earn a C or better in all courses required for the major or area of emphasis. A "P" (Pass) grade is also an acceptable grade for courses in the major if the course is taken on a Pass/No Pass basis.

AA-T TRANSFER MAJOR (18 UNITS OR MORE)

Program Requirements

POSC 101	Introduction to Politics and American Political Institutions	3
POSC 102	Introduction to United States and California Governments	3

List A: Select Three (minimum nine units)

POSC 100	Introduction to Political Science	3
POSC 110	Introduction to World Politics	3
PSYC/SOC 205	Statistics for the Behavioral Sciences	4

List B: Select two (six units)

POSC/LS 121	Introduction to Law	3
POSC/LS 240	Civil Liberties and Procedures	3
ECON 101	Principles of Economics (Macro)	3
ECON 102	Principles of Economics (Micro)	3
HIST/MCS 160	History of the Middle East from 600 to the Present	3
SOC 110	Social Problems	3
TOTAL UNITS:		**22**

PSYCHOLOGY (AA-T)

Psychology is a discipline that uses the scientific method to study animal and human behavior. This Associate in Arts in Psychology for Transfer degree offers students the opportunity to meet lower division transfer requirements for a major in Psychology, leading to a Bachelor of Arts or Bachelor of Science in Psychology at a California State University (CSU). Students who earn this degree will receive priority admissions at a CSU. The Associate in Arts in Psychology for Transfer degree is the first step in preparing students for professions and areas of interest related to psychology such as Clinical Psychology, Counseling, Medicine, Law, Management, Business, Social Work, and Teaching.

AA-T
TRANSFER MAJOR

Pursuant to SB1440, the following completion requirements must be met:
"(1) Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:
(A) The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education - Breadth Requirements.
(B) A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.

(2) Obtainment of a minimum grade point average of 2.0."

ADTs also require that students must earn a C or better in all courses required for the major or area of emphasis. A "P" (Pass) grade is also an acceptable grade for courses in the major if the course is taken on a Pass/No Pass basis.

Program Requirements

*PSYC 100	Introduction to Psychology	3
*PSYC/SOC 205	Statistics for the Behavioral Sciences	4
*PSYC 230	Research Methods in Psychology	4

List A (Select 1 course)

BIOL 100	General Biology	4
BIOL 105	Introductory Biology: Human Emphasis	4
PSYC 210	Physiological Psychology	4

List B (Select 1 course)

PSYC 110	Developmental Psychology - Child Through Adult	3
PSYC 120	Social Psychology	3
PSYC 211	Introduction to Cognitive Psychology	3
PSYC 235	Principles of Learning and Behavior Modification	3

List C (Select 1 course)

PSYC/SOC 105	Marriage, Family and Intimate Relationships	3
PSYC 115	The Psychology of Personal Growth and Development	3
PSYC/SOC 125	Human Sexuality	3
PSYC 130	Psychology of Gender	3
PSYC 225	Psychology of Abnormal Behavior	3
TOTAL UNITS		**21**

*Course is required major preparation at CSU San Marcos (CSUSM). Students planning to transfer to CSUSM are advised to select these courses to complete this degree. For more information on this major at CSUSM, please refer to the articulation agreement at ASSIST.ORG.

PUBLIC RELATIONS (CA)

This certificate includes a selection of courses that provides academic preparation to individuals who are seeking employment, or are currently employed, in public relations.

CERTIFICATE OF ACHIEVEMENT

Program Requirements		**Units**
COMM 104	Introduction to Public Relations	3
JOUR 101	Multimedia Writing and Reporting	3
JOUR 200	Mastering Social Media	3
DBA 105	Multimedia Storytelling	2
COMM 204	Public Relations Writing and Media Strategies	3
BUS 155	Marketing	3
	Or	
BUS 150	Advertising	3
CE 150	Cooperative Education Internship	1
TOTAL UNITS		**18**

RADIO AND TELEVISION (AA, CA)

Provides entry-level skills in the field of digital radio and television broadcasting. Offers hands on experience in Digital broadcasting including Television news and sports. Broadcast journalism is a strong aspect of the program.

A.A. DEGREE MAJOR OR
CERTIFICATE OF ACHIEVEMENT

Program Requirements

DBA 100	Introduction to Radio and TV	3
DBA 110	Broadcast Writing and Producing	3
DBA/ENTT 120	Digital Television Production	3
DBA/ENTT 130	Radio Production	3
DBA/CINE 170	Introduction to Video Editing	3
DBA 220	TV Production and Directing	3
	or	
* DBA 230	Digital Audio Avid Pro Tools	3
DBA 240A	Basic Television News/Sports	3
DBA 298A	Beginning Broadcast Internship	3

Electives (Select 6 units)

DBA 100L	Introduction to Radio and Television Laboratory	1
DBA 135A	Basic Radio Station Operations	3
DBA 135B	Beginning Radio Station Operations	3
DBA 135C	Intermediate Radio Station Operations	3
DBA 135D	Advanced Radio Station Operations	3
DBA 140	Radio News	3
DBA 150	Performance and Acting for Broadcast and Film	3
DBA 180	Sports Broadcasting	3
DBA 230	Digital Audio with Pro Tools	3
DBA 240B	Beginning Television News/Sports	3
DBA 240C	Intermediate Television News/Sports	3
DBA 240D	Advanced Television News/Sports	3
DBA/CINE 270	Digital Video Editing	3
DBA/CINE 275	Avid Editing for Television and Film	3
DBA 298B	Intermediate Broadcast Internship	3
BUS 150	Advertising	3
CINE/DBA 115	Creative Writing for Television and Cinema	3
CINE/DBA 125	Beginning Film and Video Field Production	3
CINE/DBA 225	Intermediate Film and Video Field Production	3
TA/ENTT 107	Lighting for Stage and Television	3
TA/ENTT 108	Stagecraft and Scene Design for Theatre and Television	3
TOTAL UNITS		**30**

*Students who are not planning to transfer to four-year university and who have a ratio emphasis may substitue DBA 230 for DBA 220.

REAL ESTATE APPRAISAL LICENSE PREPARATION (CP)

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.

An applicant to take the Real Estate Appraisal examination must:

1. Be at least 18 years of age or older.

2. Meet minimum Educational requirements: Applicants for the Trainee or Residential license must provide evidence of successful completion of 150 hours of real estate appraisal education, including 15 hours of US-PAP (Uniform Standards of Professional Appraisal Practice). Applicants for the Certified Residential license must provide proof of completion of 200 hours of real estate appraisal education (including 15 hours of USPAP). Palomar College does NOT provide further training that will prepare a student to take the Certified General License.

3. Have the appropriate Experience: No experience is required before obtaining the Real Estate Appraiser Trainee license. 2,000 hours and encompassing no less than 12 months of acceptable appraisal experience is required before obtaining the residential license. 2,500 hours and encompassing no less than 2.5 years of acceptable appraisal experience is required before obtaining the Certified Residential License. This program is designed to meet the educational requirements of two licensing levels of the Office of Real Estate Appraisers (Trainee, and Residential). RE 105 or RE 130 are recommended to meet the additional requirements of the Certified Residential License. The program does NOT meet the requirements to prepare a student for the Certified General License.

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 115	Real Estate Practice	3
RE 150	Residential Appraisal	3
TOTAL UNITS		**15**

AQB/OREA Real Property Appraiser Qualifying Criteria (Effective January 1, 2008)			
OREA License Levels	**Basic Education Requirements**	**College Level Requirements**	**Experience**
Trainee (AT)	150 Hours	N/A	N/A
Residential	150 Hours	N/A	2,000 Hours (accumulated over at least a 12-month period)
Certified Residential (AR)	200 Hours	Associate Degree*	2,500 Hours (accumulated over at least a 30-month period)
Certified General (AG)	300 Hours	Bachelor's Degree**	3,000 Hours (accumulated over at least a 30-month period)

*In lieu of the Associate Degree, an applicant can complete 21 college semester credits in courses covering: English Composition; Principles of Economics (Micro or Macro); Finance, Algebra, Geometry, or higher mathematics; Statistics; Introduction to Computers; and Business or Real Estate Law.

**In lieu of the Bachelor's Degree, an applicant can complete 30 college semester credits in courses covering: English Composition; Micro Economics; Macro Economics; Finance, Algebra, Geometry, or higher mathematics; Statistics; Introduction to Computers; Business or Real Estate Law; and two elective courses in accounting, geography, ag-economics, business management, or real estate.

REAL ESTATE BROKER LICENSE PREPARATION (AS, CA)

Requirements to apply for a Real Estate Broker's License:

To obtain a real estate broker license, you must first qualify for and pass a written Bureau of Real Estate examination.

GENERAL REQUIREMENTS

- Age: You must be 18 years of age or older to be issued a license.

- Residence: Proof of Legal Presence in the United States is required. If you are not a California resident, go to www.brea.ca.gov for more information.

- Honesty: Applicants must be honest and truthful. Conviction of a crime may result in the denial of a license.

- Experience: A minimum of two years full-time licensed salesperson experience within the last five years or the equivalent is required. For further information, see Documenting Experience Requirements for the Broker Examination at www.brea.ca.gov.

Continuing education offerings do not satisfy the college-level course requirements for this examination.

Members of the California State Bar are statutorily exempt from the college-level course requirements but still need to demonstrate they have satisfied the two years full-time licensed salesperson experience within the last five years requirement or have at least two years real estate related experience within the last five years while practicing law in California.

Copies of official transcripts are generally acceptable evidence of completed courses. Applicants who have completed the eight college-level courses statutorily required for the broker examination and license are eligible to take the salesperson examination without providing further evidence of education or experience.

A.S. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT

Program Requirements

RE 100	Real Estate Principles	3
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
ACCT 201	Financial Accounting	4

Electives (Select 9 units)

BUS 115	Business Law	3
	or	
BUS 117	Legal Environment of Business	3
RE 140	Introduction to Property Management	3
RE 155	Escrow and the Title Procedures	3
TOTAL UNITS		**28**

REAL ESTATE SALESPERSON LICENSE PREPARATION (CP)

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.

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 three courses: Real Estate Principles, Real Estate Practice, and one additional elective course listed below. Completion of the Real Estate Salesperson License Preparation Certificate satisfies the California Department of Real Estate-mandated pre-license 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 3-7 units)

ACCT 201	Financial Accounting	4
BUS 115	Business Law	3
	or	
BUS 117	Legal Environment of Business	3
RE 105	Real Estate Finance	3
RE 110	Real Estate Appraisal	3
RE 120	Legal Aspects of Real Estate	3
RE 140	Introduction to Property Management	3
TOTAL UNITS		**9 - 13**

REGISTERED DENTAL ASSISTING (AS, CA)

A.S. 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.

Admission to the Dental Assisting program is by special application. The Dental Assisting program must be completed within two years or the student may need to repeat all required Dental Assisting courses. Contact the department for more information. NOTE: For course repetition purposes, federal financial aid would not be available to students who have already attempted and/or completed required Dental Assisting courses.

Program Requirements		Units
*DA 50	Introduction to Dental Sciences and Dental Occupations	3
*DA 57	Dental Sciences and Anatomy	3
ENG 50	Introductory Composition	4
	or	
ENG 100	English Composition	4
	or	
ESL 103	Written Communication III	5
	or	
ESL 110	College Composition for Non-Native Speakers	4
	Proof of current BLS for Healthcare Providers Certificate	0

First Semester

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 82	Preventive Dentistry I	1.5

Second Semester

DA 71	Dental Radiography II	.5
DA 83	Preventive Dentistry II	.5
DA 85	Advanced Dental Procedures	5
DA 90	Clinical Rotation	6
TOTAL UNITS		**36 - 37**

*Must have completed DA 50 within 2 years and DA 57 within 5 years with a grade of "C" or better prior to admission into the Dental Assisting Program.

RETAIL MANAGEMENT (CA)

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 201	Financial Accounting	4
BMGT 101	Introduction to Management	3
BMGT 110	Human Resource Management	3
BMGT 130	Management/Leadership Issues	3
CSIT 105	Computer Concepts and Applications	3
BUS 145/ FASH 125	Retailing/Promotion	3
BUS 155	Marketing	3
BUS 205	Business Communication	3
TOTAL UNITS		**25**

SCREEN PRINTER (CP)

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
GCIP 170	Screen Printing	3
GCIP 172	Textile Screen Printing	3
GCIP 270	Commercial Screen Printing	3
TOTAL UNITS		**9**

SCREEN PRINTING (AS, CA)

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.S. DEGREE MAJOR OR
CERTIFICATE OF ACHIEVEMENT

Program Requirements		Units
GC 102	History of the Book and Publishing: Papyrus to Pixels	3
GCIP 105	Design for Print Production	3
GCIP 140	Digital Imaging/Photoshop I	3
GCIP141	Digital Imaging/Photoshop II	3
GCIP 152	Digital Publishing/Illustrator I	3
GCIP 170	Screen Printing	3
GCIP 172	Textile Screen Printing	3
GCIP 252	Digital Publishing/Illustrator II	3
GCIP 270	Commercial Screen Printing	3
BUS 152	Social Media for Business	3
TOTAL UNITS		**30**

SHEET METAL (AS, CA)

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 (619) 265-2758.

A.S. DEGREE MAJOR OR
CERTIFICATE OF ACHIEVEMENT

Program Requirements		Units
AP SM 701	Core I	4
AP SM 702	Core II	4
AP SM 703	Core III	4
AP SM 704	Core IV	4
AP SM 705	Sheet Metal Welding	3
AP SM 706	Plans & Specifications	4
AP SM 709	Foreman and Project Management Training	4
AP SM 710	Architectural Application	4
AP SM 711	HVAC I	4
AP SM 712	HVAC II	4
AP WE 710	Sheet Metal Work Experience	16
TOTAL UNITS		**55**

SOCIAL MEDIA (CA)

CERTIFICATE OF ACHIEVEMENT

The Social Media Certificate of Achievement provides a comprehensive overview of the theory and practice of social media. Students who complete the requirements will be able to demonstrate how to create and share digital content in order to establish and grow a social media presence online. Potential careers students may enter upon completion include social media strategy, public relations, and/or online journalism. There are no prerequisite or enrollment limitations.

Program Requirements		Units
BUS 150	Advertising	3
	or	
COMM 104	Introduction to Public Relations	3
BUS 152	Social Media for Business	3
BUS 173	Contemporary Job Search Techniques	1
GCMW 115	Web Page Layout/WordPress	2
GCMW 120	Designing for the Social Web	3
JOUR 130	Blogging	3
JOUR 200	Mastering Social Media	3
TOTAL UNITS		**18**

SOCIOLOGY (AA-T)

The Associate in Arts in Sociology for Transfer is designed to prepare students for a seamless transfer into the CSU system to complete a baccalaureate degree in Sociology. Sociology is the study of social behavior and human groups and focuses on social relationships, how those relationships influence people's behavior and beliefs, and how societies develop and change. Students will learn the main theoretical approaches in sociology that explain society on both a micro level through the study of social interaction, and on a macro scale through the study of large social institutions. The curriculum for the Associate in Arts in Sociology for Transfer is intended to develop critical thinking skills, to explore the diversity of our social world, and to adequately prepare students for transfer to an upper division program in Sociology. The Associate in Arts in Sociology for Transfer allows students the opportunity to meet the lower division transfer requirements for a major in Sociology.

Pursuant to SB1440, the following Associate Degree for Transfer completion requirements must be met:

(1) Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:

(A) The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements.

(B) A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.

(2) Obtainment of a minimum grade point average of 2.0.

ADTs also require that students must earn a C or better in all courses required for the major or area of emphasis. A "P" (Pass) grade is also an acceptable grade for courses in the major if the course is taken on a Pass/No Pass basis.

AA-T TRANSFER MAJOR

Program Requirements		Units
*SOC 100	Introduction to Sociology	3
SOC 110	Social Problems	3
*SOC/PSYC 205	Statistics for the Behavioral Sciences	4

List A (Select 2 courses)

SOC/PSYC 105	Marriage, Family and Intimate Relationships	3
SOC 135	Gender and Society	3
SOC/AMS/		
MCS 200	Race, Class, and Ethnic Groups in America	3

List B (Any Course Not already completed from list A or One course from List B)

SOC/PSYC 125	Human Sexuality	3
SOC 115	Introduction to Women's Studies	3
SOC 130	Introduction to Sociology of Health	3
SOC/PSYC 145	Psychology and Sociology of Aging	3
SOC 165	Self and Society	3
SOC 170	Introduction to Justice Studies	3
TOTAL UNITS		**19**

*Course is required major preparation at CSU San Marcos (CSUSM). Students planning to transfer to CSUSM are advised to select these courses to complete this degree. For more information on this major at CSUSM, please refer to the articulation agreement at ASSIST.ORG.

SOUND AND COMMUNICATION SYSTEMS INSTALLER (AS, CA)

A three-year apprenticeship program. Applicants for this program should be directed to the Riverside and San Bernardino Joint Electrical Apprenticeship Training Committees, 1855 Business Center Drive, San Bernardino, CA 92408. Telephone: (909) 890-1703.

A.S. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT

Program Requirements		Units
AP SC 701	Intro to Sound/Communication Trade Industry	4
AP SC 702	Electrical Theory and Practices DC	4
AP SC 703	Electrical Theory and Practices AC	4
AP SC 704	Semiconductor Electronics	4
AP SC 705	Intro to Digital Electronics and Signaling Devices	4
AP SC 706	Management/Alarms/Codes/Circuits	4
AP WE 713	Electrician Work Experience	16
TOTAL UNITS		**40**

SOUND TECHNICIAN (AS, CA)

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, San Diego, CA 92123. Telephone: (858) 569-6633, extension 111.

A.S. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT

Program Requirements		Units
AP SC 701	Intro to the Sound/Communication Trade Industry	4
AP SC 702	Electrical Theory and Practices DC	4
AP SC 703	Electrical Theory and Practices AC	4
AP SC 704	Semiconductor Electronics	4
AP SC 705	Introduction to Digital Electronics	4
AP SC 706	Management/Alarms/Codes/Circuits	4
AP SC 707	Life Safety and Security System Applications	4
AP SC 708	Specialized Systems and Supervision Techniques	4
AP WE 713	Electrician Work Experience	16
TOTAL UNITS		**48**

SPANISH (AA-T)

This degree will provide required course work for students majoring or minoring in Spanish. In addition, completing the course work will meet the foreign language competency requirements at many colleges and universities. Students may receive humanities credit on general education patterns for both the CSU and UC systems. It will also provide instruction for students seeking foreign language skills for personal development.

Pursuant to SB1440, the following completion requirements must be met:

"(1) Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:

(A) The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements.

(B) A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.

(2) Obtainment of a minimum grade point average of 2.0."

ADTs also require that students must earn a C or better in all courses required for the major or area of emphasis. A "P" (Pass) grade is also an acceptable grade for courses in the major if the course is taken on a Pass/No Pass basis.

AA-T TRANSFER MAJOR

Program Requirements		Units
*SPAN 101	Spanish I	5
*SPAN 102	Spanish II	5
*SPAN 201	Spanish III	5
	or	
SPAN 211	Spanish for Heritage Speakers I	5
*SPAN 202	Spanish IV	5
	or	
SPAN 212	Spanish for Heritage Speakers II	5
SPAN 235	Intermediate Conversation and Writing	3
TOTAL UNITS		**23**

*Course is required major preparation at CSU San Marcos (CSUSM). Students planning to transfer to CSUSM are advised to select these courses to complete this degree. For more information on this major at CSUSM, please refer to the articulation agreement at ASSIST.ORG.

Students placing out of SPAN 101, 102, 201, or 211 by departmental approval, prerequisite satisfaction, or Advanced Placement scores, shall use the following list of course substitutions in order to earn a total of 18 semester units in the major (Title 5, section 55063).

ARAB 101, ARAB 102, ARAB 201, CHIN 101, CHIN 102, CHIN 201, FREN 101, FREN 102, FREN 201, FREN 202, GERM 101, GERM 102, GERM 201, GERM 202, ITAL 101, ITAL 102, ITAL 201, JAPN 101, JAPN 102, JAPN 201, JAPN 202, HIST 121, HIST 150, HIST 151, CS 100, CS 101, CS 102, CS 105, CS 110, CS 125, CS 155,

All degree requirements must be satisfied, and no other substitutions are permitted. Students must complete SPAN 235 at Palomar College, unless otherwise approved by the department chair or designated department faculty member.

SPANISH (CA)

This certificate will provide course work for students interested in Spanish for the job market and academic environment. In addition, completing the course work will meet the foreign language competency requirements at many colleges and universities. It will also provide instruction for students seeking foreign language skills for personal development.

CERTIFICATE OF ACHIEVEMENT

Program Requirements		Units
SPAN 101	Spanish I	5
	or	
SPAN 101A	Spanish IA	3
	and	
SPAN 101B	Spanish IB	3
SPAN 102	Spanish II	5
SPAN 201	Spanish III	5
	or	
SPAN 211	Spanish for Heritage Speakers I 5	
SPAN 202	Spanish IV	5
	or	
SPAN 212	Spanish for Heritage Speakers II 5	
SPAN 235	Intermediate Conversation and Writing	3
TOTAL UNITS		**23 - 24**

SPEECH COMMUNICATION (AA)

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/TA125	Beginning Oral Interpretation	3
SPCH 131	Intercultural Communication	3
TOTAL UNITS		**18**

STUDIO ARTS (AA-T)

The Associate in Arts in Studio Arts for Transfer is designed to prepare students for a seamless transfer to complete a baccalaureate degree in Studio Arts and fulfill lower division transfer preparation in Studio Arts for the CSU system. Students will gain the fundamental skills, as well as the academic foundation of knowledge in Studio Arts through study of theory, the engagement in practice and the investigation of media. Emphasis is on design and composition in painting and drawing placed within historical and contemporary context.

Students are encouraged to speak to Palomar College counselors and Art department faculty, as well as consult Assist.org and university catalogues for more transfer information.

Pursuant to SB1440, the following completion requirements must be met:

(1) Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:

(A) The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements.

(B) A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.

(2) Obtainment of a minimum grade point average of 2.0.

ADTs also require that students must earn a C or better in all courses required for the major or area of emphasis. A "P" (Pass) grade is also an acceptable grade for courses in the major if the course is taken on a Pass/No Pass basis.

AA-T
TRANSFER MAJOR

Program Requirements		Units
ART 166	History of Art II - Survey of Western Art	3
*ART 104	Design and Composition	3
ART 105	Three-Dimensional Form and Design	3
*ART 102	Foundations of Drawing	3
List A: Select one (3 units)		
ART 165	History of Art I - Survey of Western Art	3
ART 163	Arts of Asia	3
ART 164	Arts of Africa, Oceania and the Americas	3
List B Select three (9 units)		
ART 120	Foundations of Life Drawing	3
ART 220	Introduction to Painting	3
ART 200	Color Theory	3
TOTAL UNITS		**24**

*Course is required major preparation at CSU San Marcos (CSUSM). Students planning to transfer to CSUSM are advised to select these courses to complete this degree. For more information on this major at CSUSM, please refer to the articulation agreement at ASSIST.ORG.

TABLE AND CHAIR MANUFACTURING (AS, CA)

Table and chair furniture is unique in that it is highly interactive with people who use them. Design and joinery must consider comfort, esthetics and structure. This program will prepare students to make a living manufacturing table and chair furniture. The study of historic period pieces will enable students to apply traditional methods of construction to modern and contemporary designs. The finest furniture in the world is handmade and yet production methods can/will be applied to increase efficiency and profit.

A.S. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT

Program Requirements

CFT 100	Fundamentals of Woodworking	4
CFT 108	Business Woodworking	2
CFT 118	Furniture Design Development	2
	or	
CFT 153	Studio Furniture Design I	2
CFT 149	Hand Joinery I	2
CFT 155	Classic American Chair Designs	2
CFT 159A	Chair and Tables/Prototype Construction I	2
CFT 159B	Chair and Tables/Prototype Construction II	2
CFT 160A	Chairs and Tables/Production Manufacturing I	2
CFT 160B	Chairs and Tables/Production Manufacturing II	2
CFT 195	Finishing Technology/Touch-Up and Repair	2

Electives (Select 2 units)

CFT 142	The Art and Craft of Planemaking	2
CFT 156	Advanced Classic American Chair Designs	2
CFT 170	Workbench Design and Production	2
CFT 180	Wood Bending and Lamination/Wood Technology	2
CFT 185	Machine Tool Set-Up and Maintenance	2
CFT 198	Advanced Wood Finishing	2
TOTAL UNITS		**24**

TECHNICAL THEATRE (AA, CA)

A program that prepares individuals to apply artistic, technical and dramatic principles and techniques to the communication of dramatic information, ideas, moods, and feelings through technical theatre methods. Includes instruction in set design, lighting, design, sound effects, theatre acoustics, scene painting, property management, costume design, technical direction and production, and use of computer applications to support these functions above.

A.A. DEGREE MAJOR CERTIFICATE OF ACHIEVEMENT

Program Requirements		**Units**
TA 100	Introduction to the Theatre	3
TA/FASH/		
ENTT 106A	Basic Costume I: Technology	3
TA/ENTT 107	Lighting for Stage and Television	3
TA/ENTT 108	Stagecraft and Scene Design for Theatre and Television	3
TA 115	Acting I	3
	or	
TA 116	Acting II	3
TA 192A	Technical Theatre Practicum I	1 - 2
TA 192B	Technical Theatre Practicum II	1 - 2

History/Literature Courses:

TA 150	Dramatic Literature and Script Analysis	3

Advanced Technical Courses (select one of the following):

TA/FASH 109	Elementary Stage Make-Up	3
FASH 135	Introductory Sewing for Apparel	3
TOTAL UNITS		**23 - 25**

THEATRE ARTS (AA)

The Palomar Theatre Program cultivates the potential of theatre to make an impact on the lives of practitioners, audiences, and communities. Through our technique classes, academic offerings and season of productions the program emphasizes the power of theatre to transform individuals and society through imagination, empathy, analysis, and action. The program empowers students to follow the discipline of craft while taking risks and developing their own artistic sensibility. Critically-acclaimed productions range from the classical to the experimental, often serving as a focal point for campus-wide dialogue on social issues. The program also emphasizes collaboration with the other disciplines in the Performing Arts Department and colleagues in the Art Department.

A.A. DEGREE MAJOR

Program Requirements:

TA 100	Introduction to the Theatre	3
TA/ENTT 107	Lighting for Stage and Television	3
TA 115	Acting I	3
TA 150	Dramatic Literature and Script Analysis	3
TA 192A	Technical Theatre Practicum I	1 - 2

Beginning Costume and Makeup Courses (Select one):

TA/ENTT/		
FASH 106A	Basic Costume I: Technology	3
TA/FASH 109	Elementary Stage Make-Up	3

Electives (Select 9 Units):

TA/ENTT 108	Stagecraft and Scene Design for Theatre and Television	3
TA 113A	Improvisational Theatre I	3
	or	
TA 113B	Improvisational Theatre II	3
TA 116	Acting II	3
TA 119	Voice and Speech	3
TA/SPCH 125	Beginning Oral Interpretation	3
TA 160	Beginning Stage Direction	3
DNCE/MUS/		
TA 173	Musical Theatre Scenes I	1
TA 184	Creative Theatre Ensemble	1 - 2
TA 191A	Rehearsal and Performance I	1 - 2
TA 191B	Rehearsal and Performance II	1 - 2
TA 191C	Rehearsal and Performance III	1 - 2
TA 191D	Rehearsal and Performance IV	1 - 2
TA 192B	Technical Theatre Practicum II	1
TA 192C	Technical Theatre Practicum III	1
TA 192D	Technical Theatre Practicum IV	1
TA 215	Acting III	3
TA 216	Acting IV	3
TOTAL UNITS		**28 - 29**

THEATRE ARTS (AA-T)

The Associate in Arts in Theatre Arts for Transfer prepares students to move into curriculum at a four-year institution leading to a baccalaureate degree in Theatre Arts. Careers in this field include teaching, design, technical theatre, theatre man-agement, professional performance, stage direction, and stage management among others. Completion of the Associate in Arts in Theatre Arts for Transfer degree provides guaranteed admission with junior status to the CSU system along with priority admission to CSU, San Marcos in the Visual and Performing Arts major. Upon completion, students will understand and be able to demonstrate the theo-ries and techniques of acting; the technical production processes for the theatre arts, demonstrate knowledge of the historical and cultural dimensions of theatre, and understand the interaction between script, actor, and audience and the areas of scenery, lighting, sound, and costume.

To obtain the Associate in Arts in Theatre Arts for Transfer students must complete the following:

Maximum of 60 CSU-transferable units with a minimum grade point average (GPA) of 2.0. and a grade of "C" or better in all courses required for the major: A "P" (Pass) grade is also an acceptable grade for courses in the major if the course is taken on a Pass/No Pass basis.

• a minimum of 18 semester units in the major as determined by the community college district, and:

one of the following general education patterns:

• the California State University General Education-Breadth (CSU GE-Breadth) pattern of 39 units; OR:

• the Intersegmental General Education Transfer Curriculum (IGETC) pattern of 37 units

Please consult a counselor regarding specific course requirements for your transfer institution.

AA-T TRANSFER MAJOR

Program Requirements

TA 100	Introduction to the Theatre	3
TA 115	Acting I	3
TA 191A	Rehearsal and Performance I	2
	and	
TA 191B	Rehearsal and Performance II	2
	or	
TA 192A	Technical Theatre Practicum I	1
	and	
TA 192B	Technical Theatre Practicum II	1
	and	
TA 192C	Technical Theatre Practicum III	1

Electives (Select 9 units excluding any courses taken above)

TA/FASH/ ENTT 106A	Basic Costume I: Technology	3
TA/ENTT 107	Lighting for Stage and Television	3
TA/ENTT 108	Stagecraft and Scene Design for Theatre and Television	3
TA/FASH 109	Elementary Stage Make-Up	3
TA 116	Acting II	3
TA 150	Dramatic Literature and Script Analysis	3
TA 191A	Rehearsal and Performance I	2
	and	
TA 191B	Rehearsal and Performance II	2
	or	
TA 192A	Technical Theatre Practicum I	1
	and	
TA 192B	Technical Theatre Practicum II	1
	and	
TA 192C	Technical Theatre Practicum III	1
TOTAL UNITS		**22**

THREE-DIMENSIONAL ARTS: CERAMICS (AA)

Programs are designed to enable the student to acquire skills in producing fine art for gallery and museum 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 104	Design and Composition	3
ART 105	3-Dimensional Form and Design	3
ART 135	Ceramics I	3
ART 136	Ceramics II	3
ART 137	Pottery Production	3
	or	
ART 138	Ceramic Surface Decoration	3
	or	
ART 266	Ceramic Sculpture II	3
ART 165	History of Art I	3
ART 166	History of Art II	3
ART 250	Ceramics III	3
ART 265	Ceramic Sculpture I	3
	Final Art Portfolio Review	0

Electives (Select 6 units)

ART 140	Foundry Techniques in Sculpture I	3
ART 156	Glass Casting I	3
ART 255	Foundry Technique in Sculpture II	3
ART 260	Sculpture I	3
ART 278	Glass Casting II	3
ART 160	Glassblowing/Glassforming I	3
ART 261	Sculpture II	3
TOTAL UNITS		**36**

THREE-DIMENSIONAL ARTS: CRAFTS (AA)

Programs are designed to enable the student to acquire skills in producing fine art for gallery and museum 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	Foundations of Drawing	3
ART 104	Design and Composition	3
ART 105	3-Dimensional Form and Design	3
ART 135	Ceramics I	3
ART 145	Design in Mixed Media	3
ART 147	Design in Enamels	3
ART 150	Jewelry and Metalsmithing Design I	3
ART 165	History of Art I	3
ART 166	History of Art II	3
ART 260	Sculpture I	3
	Final Art Portfolio Review	0

Electives (Select 6 units)

ART 136	Ceramics II	3
ART 140	Foundry Techniques in Sculpture I	3
ART 151	Jewelry and Metalsmithing Design II	3
ART 155	Stained Glass I	3
ART 261	Sculpture II	3
ART 270	Jewelry and Metalsmithing Design III	3
ART 275	Stained Glass II	3
PHOT 100	Elementary Film and Darkroom Photography	3
TOTAL UNITS		**39**

THREE-DIMENSIONAL ARTS: GLASS (AA)

Programs are designed to enable the student to acquire skills in producing fine art for gallery and museum 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	Foundations of Drawing	3
ART 105	3-Dimensional Form and Design	3
ART 156	Glass Casting	3
ART 160	Glassblowing/Glassforming I	3
ART 165	History of Art I	3
ART 166	History of Art II	3
ART 280	Glassblowing/Glassforming II	3
ART 290	Glassblowing/Glassforming III	3
	Final Art Portfolio Review	0

Electives (Select two courses)

ART 135	Ceramics I	3
ART 136	Ceramics II	3
ART 140	Foundry Techniques in Sculpture I	3
ART 155	Stained Glass I	3
ART 255	Foundry Technique in Sculpture II	3
ART 260	Sculpture I	3
ART 261	Sculpture II	3
ART 275	Stained Glass II	3
ART 278	Glass Casting II	3
TOTAL UNITS		**33**

THREE-DIMENSIONAL ARTS: JEWELRY AND METALSMITHING (AA)

Programs are designed to enable the student to acquire skills in producing fine art for gallery and museum 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	Foundations of Drawing	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 145	Design in Mixed Media	3
ART 147	Design in Enamels	3
ART 150	Jewelry and Metalsmithing Design I	3
ART 151	Jewelry and Metalsmithing Design II	3
ART 205	Indirect Metal Forming	3
ART 270	Jewelry and Metalsmithing Design III	3
	Final Art Portfolio Review	0

Electives (Select 6 units)

ART 135	Ceramics I	3
ART 140	Foundry Techniques in Sculpture I	3
ART 260	Sculpture I	3
ART 265	Ceramic Sculpture I	3
TOTAL UNITS		**42**

THREE-DIMENSIONAL ARTS: SCULPTURE (AA)

Programs are designed to enable the student to acquire skills in producing fine art for gallery and museum 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	Foundations of Drawing	3
ART 104	Design and Composition	3
ART 105	3-Dimensional Form and Design	3
ART 135	Ceramics I	3
ART 140	Foundry Techniques in Sculpture I	3
ART 165	History of Art I	3
ART 166	History of Art II	3
ART 260	Sculpture I	3
ART 261	Sculpture II	3
ART 265	Ceramic Sculpture I	3
ART 266	Ceramic Sculpture II	3
	Final Art Portfolio Review	0

Electives (Select 6 units)

ART 136	Ceramics II	3
ART 145	Design in Mixed Media	3
ART 150	Jewelry and Metalsmithing Design I	3
ART 160	Glassblowing/Glassforming I	3
ART 205	Indirect Metal Forming	3
ART 255	Foundry Techniques/Sculpture II	3
TOTAL UNITS		**42**

UNIVERSITY STUDIES (AA, AS)

Contact the Counseling Center for further information.
760-744-1150, ext. 2179
Office: SSC-18A

Associate Degree, Certificate of Achievement and Certificate of Proficiency requirements are listed in Section 6 (green pages). This program is designed for students who wish a broad knowledge of liberal arts and sciences, plus additional course work in an "Area of Emphasis. "This program would be an ideal choice for students planning on transferring to the California State University (CSU) or University of California (UC), as the student may satisfy their general education requirements plus focus on transferable course work relating to baccalaureate majors at these institutions.

Because admission and major preparation requirements vary at each transfer institution, courses used to fulfill requirements for an emphasis should be selected with the assistance of a Palomar College counselor.

Disclaimer: California Community College courses listed on ASSIST are preapproved to meet the lower-division major prep requirements. Any other courses used by Palomar College to meet an emphasis are subject to approval by your transfer institution.

*Laboratory courses "L" may be used toward the major when the corresponding lecture is passed with a "C" or better.

ASSOCIATE DEGREE MAJOR

Program Requirements	Units
Courses may be double-counted between the GE course work and the Area of Emphasis	
California State University General Education (CSUGE) pattern	39
or	
Intersegmental General Education Transfer Curriculum (IGETC)	34
Area of Emphasis	18
District Requirements	
American History and Institutions	6
Health and Fitness	4
Multicultural	3
TOTAL UNITS	**65 - 70**

Select An Area of Emphasis:
Students may earn only one University Studies degree.

Emphasis in Business

This emphasis focuses on an analysis of the organization and operation of business enterprises. It will allow students to respond to a variety of business-related challenges, and stresses problem-solving skills involved in making managerial, financial, and technical decisions based on available data, tools, and resources.

Students may use this emphasis to focus on transfer courses required for such baccalaureate majors as Accountancy, Business Administration, Business Economics, Finance, Hospitality Management, Information Systems, International Business, Management, Management Science, Mathematical Economics and Economic Theory, Public Administration, and Recreation Administration.

Select 18 units minimum
Must complete course work from at least two disciplines.
ACCT 201, 202
BUS 100, 115, 117, 125, 204, 205
CSCI 112, 114, 146, 212
CSIT 105, 120
ECON 101, 102, 110, 115, 120
MATH 110, 120, 130, 135, 140, 141, 146, 200, 205, 206
PHIL 116, 121, 122
POSC 102
PSYC 100, 115, 205, 230
SOC 100, 205

Emphasis in Culture and Society

This emphasis focuses on an exploration and understanding of the central issues in society today: race, ethnicity, class, gender, sexuality, nationality, and religion. It will allow students to experience and explore the diverse groups that make up America and the world.

Students may use this emphasis to focus on transfer courses required for such baccalaureate majors as African-American Studies, American Indian Studies, American Studies, Chicana/Chicano Studies, Ethnic Studies, Gender Studies, Jewish Studies, Latin American Studies, Multicultural Studies, and Women's Studies.

Select 18 units minimum
Must complete course work from at least two disciplines.
AS 100, 101, 102, 120, 126
AIS 100, 101, 102, 105, 115, 125, 130, 135, 140, 145, 150, 165
AMS 100, 105, 200
ANTH 126, 130, 140
ARAB 101, 102, 201
CS 100, 101, 102
COMM 105
ENG 280
HIST 130
JAPN 130
MCS 100, 125, 200
PSYC 125, 145
RS 101
SOC 115, 125, 135, 145, 200
SPCH 131

Emphasis in Education

This emphasis focuses on the integration of concepts from the arts, humanities, literature, natural sciences, and social sciences, offering a broad foundation in diverse disciplines. It will allow students to develop skills in quantitative reasoning, critical thinking, and communication in the English language, both orally and in writing.

Students may use this emphasis to focus on transfer courses required for such baccalaureate majors as Liberal Studies and Elementary Subject Matter Preparation.

Select 18 units minimum
Must complete course work from at least two disciplines.
BIOL 100 or 101, 101L
CHDV 100
DNCE 101
ES 100, 100L
ENG 100 or ESL 110, 202 **or** 203, 205, 220, 221, 225, 226
GEOG 103, 105
HIST 101, 102, 107
KINE 102
MATH 105, 106
MUS 100
PHIL 113, 116, 200
PHSC 101, 101L
SPCH 100, 105
TA 100

Emphasis in Fine and Performing Arts

This emphasis focuses on the contributions the arts have made, and continue to make, in establishing our cultural and historical traditions. It will allow students to concentrate on theoretical study and an appreciation of the arts from a critical and principally non-performing point-of-view, or to focus on the expression of, or performance in, one or more artistic mediums.

Students may use this emphasis to focus on transfer courses required for such baccalaureate majors as Dance, Fashion Design, Graphic Design, Interior Design, Music, Studio Arts, and Theatre Arts.

Select 18 units minimum
Must complete course work from at least two disciplines
ARCH 150, 215, 216
ART 100, 102, 103, 104, 105, 120, 121, 145, 163, 164, 165, 166, 260
ARTD 200
BUS 145
CINE 102, 103, 120
DNCE 100, 101, 105, 110, 111, 115, 117, 118, 121, 130, 131, 140, 141, 149, 205,
  206, 210 , 211, 217, 218, 230
ENTT 106A, 107, 108
FASH 100, 105, 106A, 109, 110, 120, 125, 130, 135, 136, 139, 145
GC 100
GCIP 140
HIST 105, 106
ID 100, 115, 125, 130, 150
MUS 100, 101, 103, 105, 106, 110, 111, 115, 116, 117, 171, 210, 215, 216, 220, 222
PHOT 100, 125
TA 100, 105, 106A, 107, 108, 109, 113A, 113B, 115, 116, 140, 141, 150,
  215, 216

Emphasis in Health and Fitness

This emphasis focuses on behaviors that protect and promote health at home, at school, and in the community. It presents the theory and science, both biological and physical, behind healthy growth and development throughout the life cycle.

Students may use this emphasis to focus on transfer courses required for such baccalaureate majors as Kinesiology, Nursing, Nutrition, and Physical Education.

Required courses (8 units minimum)
BIOL 210, 211

Select 10 units minimum
BIOL 100 or 101, 101L, 105 or 106, 145, 145L,185, 200, 201, 212
CHEM 100, 104, 105, 110, 110L, 115, 115L, 205
CHDV 100
EME 100
HE 100, 104, 165
MATH 120, 135
NUTR 165, 185
PHYS 120, 121, 200, 201
PSYC 100, 110, 120, 205, 210
SOC 100, 130, 205

Emphasis in Humanities

This emphasis focuses on the methods and values of humanistic study. It will allow students to investigate the role philosophy, literature, religion, history, communication, and the arts play in the shaping of human cultures.

Students may use this emphasis to focus on transfer courses required for such baccalaureate majors as Comparative Literature, Humanities, Philosophy, Religious Studies, and World Literature.

Select 18 units minimum
Must complete course work from at least two disciplines
ENG 100 or ESL 110, 135, 136, 202, 203, 205, 210, 211, 215, 220, 221, 225, 226,
230, 240, 245, 250
HIST 105, 106
HUM 100, 101
PHIL 111, 113, 114, 116, 121, 122, 125, 126, 140, 141, 200
RS 101, 105, 110
SPCH 100, 105, 115, 120, 125, 131
TA 125

Emphasis in Mathematics and Science

This emphasis focuses on training in the scientific method, the fundamental principles of natural science, and the principle laws and theories governing the physical and life sciences. It will also allow students to focus on the mathematical concepts, analytical thinking, and quantitative skills necessary for many other disciplines.

Students may use this emphasis to focus on transfer courses required for such baccalaureate majors as Applied Mathematics, Architecture, Astronomy, Aviation, Biochemistry, Biology, Biotechnology, Botany, Chemistry, Computer Science, Earth Science, Environmental Resource Management, Environmental Science, Geography, Geology, Geosciences, Marine Biology, Mathematics, Microbiology, Oceanography, Pre-Engineering, and Statistics.

Select 18 units minimum
Must complete at least one course in Mathematics and one in Science
ASTR 100, 105L, 120
BIOL 100 or 101, 101L, 102, 105 or 106, 114, 114L, 118, 118L, 125 or
126, 126L, 130 or 131, 131L, 135, 140 or 141, 141L, 145, 145L, 185,
200, 201, 210, 211, 212
CHEM 110, 110L, 115, 115L, 205, 220, 221
CSCI 112, 114, 210, 212, 222
ES 100, 100L, 115
ENGR 210, 210L, 235, 236, 245
GEOG 100, 100L, 103, 105, 110, 115, 120, 125
GEOL 100, 100L, 110, 120, 150, 150L
MATH 100, 110, 115, 120, 130, 135, 140, 141, 200, 205, 206, 245
NUTR 185
OCN 100, 100L
PHSC 100, 100L, 101, 101L
PHYS 120, 121, 200, 201, 230, 231, 232
PSYC 205, 210
SOC 205, 205L

Emphasis in Media and Communication

This emphasis focuses on various media and on how messages are produced, used, and interpreted. In addition, it will allow students to develop and apply skills in speaking, listening, and understanding verbal and non-verbal meanings.

Students may use this emphasis to focus on transfer courses required for such baccalaureate majors as Cinema, Communications, Journalism, Mass Media, Radio and Television, Speech, and Telecommunications and Film.

Select 18 units minimum
Must complete course work from at least two disciplines
ANTH 107
CINE 100, 102, 103, 225
COMM 100
DBA 100, 110, 220, 225
ENG 100 or ESL 110, 150, 202, 203, 215
JOUR 101, 105, 140
PHOT 100, 105, 140
SPCH 100, 105, 115, 120, 125, 131
TA 100, 125

Emphasis in Social Sciences

This emphasis focuses on the nature of individual and collective human behavior. It will allow students to explore the political, economic, social, and psychological structures and institutions of human beings.

Students may use this emphasis to focus on transfer courses required for such baccalaureate majors as Administration of Justice, Anthropology, Child Development, Criminology, Gerontology, Government, History, Human Development, Political Science, Psychology, and Sociology.

Select 18 units minimum
Must complete course work from at least two disciplines
AJ 100, 102, 103, 104, 110
AS 101, 102, 126
AIS 101, 102, 130, 140
AMS 200
ANTH 100, 100L or 101, 105, 107, 110, 115, 125, 126, 130, 137, 140, 225
BIOL 100 or 101, 101L, 105 or 106
CS 101
CHDV 100, 103, 104, 105, 115
COMM 100, 105
CSIT 105
ECON 101, 102, 120
ENG 150
GEOG 103, 105
HE 165
HIST 101, 102, 105, 106, 107, 108, 121, 130, 140, 141, 150, 151
MATH 120
MCS 200
NUTR 165
POSC 100, 101, 102, 110
PSYC 100, 105, 110, 115, 120, 125, 130, 145, 205, 210, 225, 230, 235
RS 102
SOC 100, 105, 110, 115, 125, 130, 135, 145, 200, 205

Emphasis in World Languages

This emphasis focuses on exploring the connection of language to daily life and cultural context. It will provide a background in English language, as well as promote listening, writing, speaking, and reading comprehension skills in one or more foreign languages.

Students may use this emphasis to focus on transfer courses required for such baccalaureate majors as Linguistics, specific foreign language majors, and any other major requiring proficiency in one or more foreign languages.

Select 6 units minimum
ENG 100 or ESL 110, 202, 203
PHIL 200
SPCH 100, 131

Select 12 units minimum
AIS 107A, 107B, 108A, 108B, 151, 161A, 161B, 166A, 166B, 167A, 167B, 207A, 207B, 266A, 266B
ASL 100, 100L, 101, 101L, 110, 205, 205L, 206, 206L
ANTH 107
ARAB 101, 102, 201
CHIN 101, 102, 201
ENG 150
FREN 101, 102, 201, 202
GERM 101, 102, 201, 202
ITAL 101, 102, 201
JAPN 101, 102, 201, 202
SPAN 101, 101A, 101B, 102, 201, 202, 211, 212, 235

VENEERING TECHNOLOGY (AS, CA)

The world's most beautiful woods are processed into veneers. Veneered furniture has a rich history in both period and contemporary furniture. This program will prepare students to make a living manufacturing veneered furniture. The study of historic period pieces will enable students to apply traditional methods of construction to modern and contemporary designs. Students will be able to design and fabricate period furniture as well as contemporary furniture pieces which use veneer as the primary visual wood or utilize veneer in the visual design elements of the piece. Students will be able to work with a client to design and fabricate commissioned veneered furniture pieces. Students will also be able to design a line of furniture, which can be fabricated, utilizing a combination of production methods of hand craftsmanship. The finest furniture in the world is handmade and yet production methods can/will be applied to increase efficiency and profit.

A.S. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT

Program Requirements

CFT 100	Fundamentals of Woodworking	4
CFT 105	Machine Woodworking/Furniture	4
CFT 108	Business Woodworking	2
CFT 118	Furniture Design Development	2
	or	
CFT 153	Studio Furniture Design I	2
CFT 148	Marquetry, Inlay and Veneering	2
CFT 151	Veneering Technology I	2
CFT 152	Veneering Technology II	2
CFT 195	Finishing Technology/Touch-Up and Repair	2

Electives (Select 2 units)

CFT 110A	Period Case Furniture Design	4
CFT 111A	Period Case Furniture Production	4
CFT 142	The Art and Craft of Planemaking	2
CFT 143	Decorative Box Making	2
CFT 144	Production Wood Products I	1
CFT 145	Production Wood Products II	1
CFT 180	Wood Bending and Lamination/Wood Technology	2
TOTAL UNITS		**22**

VIDEO GAME DEVELOPER (CP)

The Video Game Developer certificate program introduces students to the video game industry, video game design and programming.

CERTIFICATE OF PROFICIENCY

Program Requirements		**Units**
CSCI 160	Overview of the Video Game Industry	4
CSCI 161	Video Game Design	4
CSCI 260	Video Game Programming I	3
TOTAL UNITS		**11**

WASTEWATER TECHNOLOGY EDUCATION (AS, CA)

Provide comprehensive education to a diverse constituency for a career in the water and wastewater field that prepares students to contribute effectively in a profession responsible for protecting public health.

A.S. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT

Program Requirements		Units
WWT/WTE 50	Calculations in Water/Wastewater Technology	3
WWT 52	Basic Plant Operations: Wastewater Treatment	3
WWT 54	Wastewater Collection Systems	3
WWT/WTE 56	Intro to Electrical and Instrumentation Processes	3
WWT/PWM/ WTE 60	Public Works Management	3
WWT 64	Advanced Plant Operations: Wastewater Treatment	3
WWT/WTE 66	Motors, Pumps, and Hydraulics	3

Electives (Select 6 units)		
WWT/WTE 58	Backflow Tester Training	3
WWT/WTE 62	Cross Connection Specialist	3
WWT 97	Wastewater Technology Education Topics	.5 - 4
* CE 100	Cooperative Education	3 - 4
TOTAL UNITS		**27**

Cooperative Education must be related to this major.

WATER TECHNOLOGY EDUCATION (AS, CA)

Provide comprehensive education to a diverse constituency for a career in the water and wastewater field that prepares students to contribute effectively in a profession responsible for protecting public health.

A.S. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT

Program Requirements		Units
WWT/WTE 50	Calculations in Water/Wastewater Technology	3
WTE 52	Water Distribution Systems	3
WTE 54	Basic Plant Operations: Water Treatment	3
WWT/WTE 56	Intro to Electrical and Instrumentation Processes	3
WWT/PWM/ WTE 60	Public Works Management	3
WTE 64	Laboratory Analysis for Water/Wastewater	3
WWT/WTE 66	Motors, Pumps, and Hydraulics	3

Electives (Select 9 units)		
WTE/WWT 58	Backflow Tester Training	3
WTE/WWT 62	Cross Connection Specialist	3
WTE 72	Waterworks Distribution II	3
WTE 74	Advanced Plant Operations: Water Treatment and Reclamation	3
WTE 97	Water Technology Education Topics	.5 - 4
* CE 100	Cooperative Education	3 - 4
TOTAL UNITS		**30**

* Cooperative Education must be related to this major.

WEB DESIGN AND DEVELOPMENT (AS, CA)

Web Design and Development is a series of courses that bind both Website Design and Website Programming to produce quality information for an organization. Web professionals that do both design and programming are generally employed in small-to-midsize businesses that need their employees to have a wide range of skills to implement a businesses Web presence.

Key areas of focus in this degree are: Web Page Design and Layout; Web Graphics; Design of Applications for Mobile Devices; Web Accessibility; HTML; Cascading Style Sheets (CSS); JavaScript/jQuery; Ajax, Social Media and server-side development languages, such as PHP or ASP.

A.S. DEGREE MAJOR OR CERTIFICATE ACHIEVEMENT

Program Requirements		
BUS 152	Social Media for Business	3
CSWB 110	Web Site Development with HTML5/CSS3	3
CSWB 120	JavaScript and jQuery	3
CSWB 135	Advanced JavaScript and Mobile Apps	3
CSWB 150	PHP with MySQL	3
GCMW 102	Web Page Layout I	3
GCMW 202	Web Page Layout II	3
GCIP 140	Digital Imaging/Photoshop I	3
BUS 155	Marketing	3
GCMW 115	Web Page Layout/WordPress	2
TOTAL UNITS		**29**

WEB DEVELOPMENT (CA)

This program includes the Web page design and programming languages that allow a developer to build dynamic Web applications.

CERTIFICATE OF ACHIEVEMENT

Program Requirements		
CSWB 120	JavaScript and jQuery	3
CSWB 150	PHP with MySQL	3

Program Electives (Choose one course)		
CSWB 110	Web Site Development with HTML5/CSS3	3
CSIT 150	Introduction to SQL	3
TOTAL UNITS		**9**

WEB: FRONT END DESIGN (AS, CA)

This certificate prepares students to gain competence with the industry standards for web design and development through a range of digital and software skills. Core competencies include project management, site and file management, cross-platform design and development, and distribution across the Internet. Courses offer opportunities for front- and back-end development, current popular software, search engine optimization, social media, user experience, responsive web development for a range of digital devices, web graphics, and accessibility compliance. Students will be able to make choices with message design, web graphic design, motion graphics, coding, and advanced web skills.

A.S. DEGREE MAJOR/CERT. ACHIEVEMENT

Program Requirements		Units
BUS 157	E-Commerce	3
	or	
CSWB 110	Web Site Development with HTML5/CSS3	3
GCMW 102	Web Page Layout I	3
GCMW 202	Web Page Layout II	3
GCMW 177	Search Engine Optimization (SEO) for Web Design	3
GCIP 140	Digital Imaging/Photoshop I	3
GCMW 220	Designing for Web Standards	3
GCMW 115	Web Page Layout/WordPress	2
Electives: Select one course		
GC 115	Graphics and Media: A Multicultural Perspective	3
GCIP 152	Digital Publishing/Illustrator I	3
GCMW 165	Digital Video Design	3
GCMW 215	Web Page Layout/WordPress II	2
TOTAL UNITS		**22-23**

WELDING TECHNOLOGY (AS, CA)

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.S. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT

Program Requirements		Units
WELD 100	Welding I	3
WELD/ IT 108	Technical Mathematics	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 135	Print Reading for Welders	3
WELD 140	Qualification of Welders	3
WELD 145	Pipe Welding	3
WELD 150	Welding Inspection	3
WELD 160	Metal Layout for Fabrication	3
TOTAL UNITS		**30**

WOODWORKING FUNDAMENTALS (CA)

This program provides the foundational skills needed to enter the workplace and/or pursue an advanced degree in Cabinet and Furniture Technology. Students will have the technical knowledge and skills needed to select the appropriate raw materials required to design and fabricate wooden components; to set up, operate and maintain industrial woodworking machinery, and to complete assigned woodworking projects.

CERTIFICATE OF ACHIEVEMENT

Program Requirements		
CFT 100	Fundamentals of Woodworking	4
CFT 105	Machine Woodworking/Furniture	4
CFT 149	Hand Joinery I	2
CFT 195	Finishing Technology/Touch-Up and Repair	2
TOTAL UNITS		**12**

WOODWORKING SKILLS TECHNOLOGY (AS, CA)

The finest furniture in the world is hand made. Skilled craftsman are rare and valuable. There is always a market for quality. This program will prepare students to make a living at woodworking with an emphasis on hand skills, traditional methods and European craftsmanship. Students will gain competence in the use of hand tools, power tools, and power machines and be able to properly select and safely use/operate them. Students will be able efficiently sharpen all of hand tools used. Students will gain basic proficiency in the following processes/techniques/skills; lathe turning, carving, wood bending, veneering, hand joinery and finishing. Students will also be able to write a business plan and gain an understanding of the operations of running a small business.

A.S. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT

Program Requirements		
CFT 100	Fundamentals of Woodworking	4
CFT 108	Business Woodworking	2
CFT 118	Furniture Design Development	2
	or	
CFT 153	Studio Furniture Design I	2
CFT 149	Hand Joinery I	2
CFT 151	Veneering Technology I	2
CFT 176	The Lathe - An Introduction to Woodturning	2
CFT 180	Wood Bending and Lamination/Wood Technology	2
CFT 187	Introduction to Carving	2
CFT 195	Finishing Technology/Touch-Up and Repair	2
Electives (Select 2 units)		
CFT 142	The Art and Craft of Planemaking	2
CFT 143	Decorative Box Making	2
CFT 144	Production Wood Products I	1
CFT 145	Production Wood Products II	1
CFT 155	Classic American Chair Designs	2
CFT 156	Advanced Classic American Chair Designs	2
CFT 175	Jigs/Fixtures and Routers	2
TOTAL UNITS		**22**

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.

Student Learning Outcomes

Student Learning Outcomes identify the knowledge, skills, abilities and attitudes that students will be able to demonstrate at the end of a course or program of study. Student Learning Outcomes are assessed regularly, and assessment results are used for making improvements to the course, and/or the program, if necessary.

A list of Student Learning Outcomes for Palomar College courses is available at http://www.palomar.edu/slo The list is updated twice annually.

General Education/Institutional Student Learning Outcomes are also available at http://www.palomar.edu/slo/

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 Associate 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 Associate degree but which are not intended for transfer to a four-year college or university.

100 – 299: Courses which count toward an Associate 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.

700 – 799: Apprenticeship courses which may apply toward certificate and Associate degree requirements.

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 10 campuses of the University of California system.

Course Identification Numbering System (C-ID)

The Course Identification Numbering System (C-ID) is a statewide numbering system independent from the course numbers assigned by local California community colleges. A C-ID number next to a course signals that participating California colleges and universities have determined that courses offered by other California community colleges are comparable in content and scope to courses offered on their own campuses, regardless of their unique titles or local course number. Thus, if a schedule of classes or catalog lists a course bearing a C-ID number, for example COMM 110, students at that college can be assured that it will be accepted in lieu of a course bearing the C-ID COMM 110 designation at another community college. In other words, the C-ID designation can be used to identify comparable courses at different California community colleges. However, students should always go to www.assist.org to confirm how each college's course will be accepted at a particular four-year college or university for transfer credit.

The C-ID numbering system is useful for students attending more than one California community college and is applied to many of the transferable courses students need as preparation for transfer. Because these course requirements may change and because courses may be modified and qualified for or deleted from the C-ID database, students should always check with a counselor to determine how C-ID designated courses fit into their educational plans for transfer.

Students may consult the ASSIST database at www.assist.org for specific information on C-ID course designations. Counselors can help students interpret or explain this information.

C-ID Courses

Following is a list of Palomar College courses with California C-ID Number approvals at the time of catalog publication. This list is subject to change as new C-ID Numbers become available.

Palomar College Course	C-ID Number
ACCT 201	C-ID ACCT 110
ACCT 202	C-ID ACCT 120
AJ 100	C-ID AJ 110
AJ 101	C-ID AJ 124
AJ 102	C-ID AJ 122
AJ 103	C-ID AJ 160
AJ 104	C-ID AJ 120
AJ 110	C-ID AJ 140
AJ 131	C-ID AJ 220
AJ 210	C-ID AJ 150
AMS 200	C-ID SOCI 150
ANTH 100	C-ID ANTH 110
ANTH 101	C-ID ANTH 115L
ANTH 100L	C-ID ANTH 115L
ANTH 101	C-ID ANTH 110
ANTH 105	C-ID ANTH 120
ANTH 107	C-ID ANTH 130
ANTH 110	C-ID ANTH 150
ART 102	C-ID ARTS 110
ART 103	C-ID ARTS 205
ART 104	C-ID ARTS 100
ART 105	C-ID ARTS 101
ART 120	C-ID ARTS 200
ART 163	C-ID ARTH 130
ART 164	C-ID ARTH 140
ART 165	C-ID ARTH 110
ART 166	C-ID ARTH 120
ART 169	C-ID ARTH 150
ART 200	C-ID ARTS 270
ART 220	C-ID ARTS 210
BIOL 200	C-ID BIOL 190
BIOL 201	C-ID BIOL 140
BIOL 210	C-ID BIOL 110
BIOL 211	C-ID BIOL 120
BUS 100	C-ID BUS 110
BUS 104	C-ID BUS 140
BUS 117	C-ID BUS 120
BUS 204	C-ID MATH 110
BUS 205	C-ID BUS 115
CHDV 100	C-ID CDEV 100
CHDV 101	C-ID ECE 120
CHDV 105	C-ID ECE 200
CHDV 115	C-ID CDEV 110
CHDV 120	C-ID ECE 220
CHDV 172	C-ID ECE 230

CHDV 185	C-ID ECE 130
CHDV 201	C-ID ECE 210
CHEM 110 and 110L	C-ID CHEM 110
CHEM 110, 110L, 115, and 115L	C-ID CHEM 120S
CHEM 220	C-ID CHEM 150
CHEM 220 and 221	C-ID CHEM 160S
COMM 100	C-ID JOUR 100
COMM 104	C-ID JOUR 150
CSCI 112	C-ID COMP 122
CSCI 210	C-ID COMP 132
CSCI 212	C-ID COMP 142
CSIT 105	C-ID ITIS 120
CSIT 125	C-ID ITIS 120
CSIT 145	C-ID ITIS 130
CSNT 110	C-ID ITIS 110
CSNT 111	C-ID ITIS 150
CSNT 122	C-ID ITIS 155
CSNT 181	C-ID ITIS 160
ECON 101	C-ID ECON 202
ECON 102	C-ID ECON 201
EME 100	C-ID KIN 101
ENG 135	C-ID ENGL 200
ENG 202	C-ID ENGL 105
ENG 203	C-ID ENGL 110
ENG 205	C-ID ENGL 120
ENG 210	C-ID ENGL 160
ENG 211	C-ID ENGL 165
ENG 220	C-ID ENGL 140
ENG 221	C-ID ENGL 145
ENG 225	C-ID ENGL 130
ENG 226	C-ID ENGL 135
ENTT 107	C-ID THTR 173
ENTT 108	C-ID THTR 172
ES 100	C-ID GEOL 120
ES 100L	C-ID GEOL 120L
FASH 109	C-ID THTR 175
GEOG 100	C-ID GEOG 110
GEOG 100L	C-ID GEOG 111
GEOG 103	C-ID GEOG 125
GEOG 105	C-ID GEOG 120
GEOG 110	C-ID GEOG 130
GEOG 120	C-ID GEOG 155
GEOG 125	C-ID GEOG 140
GEOG 195	C-ID GEOG 160
GEOL 100	C-ID GEOL 100
GEOL 100L	C-ID GEOL 100L
GEOL 150	C-ID GEOL 110
GEOL 150L	C-ID GEOL 110L
HE 104	C-ID KIN 101
HIST 101	C-ID HIST 130
HIST 102	C-ID HIST 140
HIST 105	C-ID HIST 170
HIST 106	C-ID HIST 180
HIST 107	C-ID HIST 150
HIST 108	C-ID HIST 160
JOUR 101	C-ID JOUR 110
JOUR 105	C-ID JOUR 130
JOUR 130	C-ID JOUR 120
JOUR 140	C-ID JOUR 160
JOUR 205	C-ID JOUR 210
KINE 100	C-ID KIN 100
MATH 110	C-ID MATH 151
MATH 120	C-ID MATH 110
MATH 130	C-ID MATH 140
MATH 140	C-ID MATH 211
MATH 141	C-ID MATH 221
MATH 200	C-ID MATH 250
MATH 205	C-ID MATH 230
MATH 206	C-ID MATH 240
MCS 200	C-ID SOCI 150
MUS 100	C-ID MUS 100
MUS 105	C-ID MUS 120
MUS 106	C-ID MUS 130
MUS 110	C-ID MUS 125
MUS 111	C-ID MUS 135
MUS 148	C-ID MUS 180
MUS 149	C-ID MUS 180
MUS 151	C-ID MUS 180
MUS 152	C-ID MUS 180
MUS 155	C-ID MUS 180
MUS 157	C-ID MUS 180
MUS 158	C-ID MUS 180
MUS 172	C-ID MUS 180
MUS 184	C-ID MUS 180
MUS 198	C-ID MUS 180
MUS 210	C-ID MUS 140
MUS 211	C-ID MUS 150
MUS 215	C-ID MUS 145
MUS 216	C-ID MUS 155
MUS 220	C-ID MUS 160
NUTR 185	C-ID NUTR 110
NUTR 190	C-ID NUTR 120
PHIL 111	C-ID PHIL 100
PHIL 116	C-ID PHIL 110
PHIL 121	C-ID PHIL 120
PHIL 140	C-ID PHIL 130
PHIL 141	C-ID PHIL 140
PHIL 201	C-ID PHIL 210
PHOT 140	C-ID JOUR 160
PHYS 120	C-ID PHYS 105
PHYS 121	C-ID PHYS 110
PHYS 120 and 121	C-ID PHYS 100S
PHYS 230	C-ID PHYS 205
PHYS 231	C-ID PHYS 210
PHYS 232	C-ID PHYS 215
PHYS 230, 231 and 232	C-ID PHYS 200S
POSC 101 and 102	C-ID POLS 110
PSYC 100	C-ID PSY 110
PSYC 105	C-ID SOCI 130
PSYC 110	C-ID PSY 180
PSYC 115	C-ID PSY 115
PSYC 120	C-ID PSY 170
PSYC 125	C-ID PSY 130
PSYC 205	C-ID MATH 110 and SOCI 125
PSYC 210	C-ID PSY 150
PSYC 225	C-ID PSY 120
PSYC 230	C-ID PSY 205B
SOC 100	C-ID SOCI 110
SOC 105	C-ID SOCI 130
SOC 110	C-ID SOCI 115

See Catalog addendum at http://www.palomar.edu/catalog

SOC 125 .... C-ID PSY 130
SOC 135 ....C-ID SOCI 140
SOC 200 .... C-ID SOCI 150
SOC 205 ....C-ID MATH 110 and SOCI 125
SPAN 101 .... C-ID SPAN 100
SPAN 102 .... C-ID SPAN 110
SPAN 201 .... C-ID SPAN 200
SPAN 202 .... C-ID SPAN 210
SPAN 211 .... C-ID SPAN 220
SPAN 212 .... C-ID SPAN 230
SPCH 100 .... C-ID COMM 110
SPCH 105 .... C-ID COMM 120
SPCH 115 .... C-ID COMM 130
SPCH 290 .... C-ID COMM 160B
SPCH 125 .... C-ID COMM 170
SPCH 120 .... C-ID COMM 180
SPCH 131 .... C-ID COMM 150
TA 100 .... C-ID THTR 111
TA 106A + TA 106B .... CID THTR 174
TA 107 .... C-ID THTR 173
TA 108 .... C-ID THTR 172
TA 109 .... C-ID THTR 175
TA 115 .... C-ID THTR 151
TA 116 .... C-ID THTR 152
TA 125 .... C-ID COMM 170
TA 140 .... C-ID THTR 113
TA 150 .... C-ID THTR 114
TA 191A .... C-ID THTR 191
TA 191B .... C-ID THTR 191
TA 191C .... C-ID THTR 191
TA 191D .... C-ID THTR 191
TA 192A .... C-ID THTR 192
TA 192B .... C-ID THTR 192
TA 192C .... C-ID THTR 192
TA 192D .... .C-ID THTR 192
ZOO 200 .... C-ID BIOL 110B
ZOO 203 .... C-ID BIOL 120B

Accounting (ACCT)

See also Business

Contact the Business Administration Department for further information.
760-744-1150, ext. 2488
Office: MD-341
Associate Degree, Certificate of Achievement and Certificate of Proficiency requirements are listed in Section 6 (green pages).

COURSE OFFERINGS

ACCT 101   Bookkeeping   (3)
3 hours lecture
Note: *Not open to students who have completed ACCT 201*
Transfer acceptability: *CSU*
Comprehensive coverage of the basic bookkeeping cycle, including journalizing, posting, worksheet and financial statements. Designed to give practical preparation for bookkeeping positions.

ACCT 104   Accounting Spreadsheet Concepts   (2)
2 hours lecture
Prerequisite: *A minimum grade of 'C' in ACCT 101 or ACCT 201, or concurrent enrollment in ACCT 101 or ACCT 201*
Transfer acceptability: *CSU*
Application of fundamental and some intermediate spreadsheet concepts, principles, and commands in working with templates and modeling problems in accounting principles.

ACCT 105   Individual Income Taxes   (4)
4 hours lecture
Transfer acceptability: *CSU*
Tax planning and preparation topics for individuals including filing status, exemptions, income and exclusions, business expenses, itemized deductions, credits, capital gains, depreciation tax payments, California Personal Income Tax.

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 110   QuickBooks   (2)
1 hour lecture - 3 hours laboratory
Prerequisite: *A minimum grade of 'C' in ACCT 101, or ACCT 201*
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 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: *A minimum grade of 'C' in ACCT 201*
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 and/or laboratory may be scheduled by the department. Refer to Class Schedule.*
Transfer acceptability: *CSU*
Topics in Accounting. See Class Schedule for specific topic offered. Course title will designate subject covered.

ACCT 201   Financial Accounting   (4)
4 hours lecture
Transfer acceptability: *CSU; UC*
C-ID ACCT 110
This is the study of accounting as an information system, examining why it is important and how it is used by investors, creditors, and others to make decisions. The course covers the accounting information system, including recording and reporting of business transactions with a focus on the accounting cycle, the application of generally accepted accounting principles, the financial statements, and statement analysis. Includes issues relating to asset, liability, and equity valuation, revenue and expense recognition, cash flow, internal controls, and ethics.

ACCT 202   Managerial Accounting   (4)
4 hours lecture
Prerequisite: *A minimum grade of 'C' in ACCT 201*
Transfer acceptability: *CSU; UC*
C-ID ACCT 120
This is the study of how managers use accounting information in decision-making, planning, directing operations, and controlling. Focuses on cost terms and concepts, cost behavior, cost structure and cost-volume-profit analysis in manufacturing and service environments.

Administration of Justice (AJ)

Contact Public Safety Programs for further information.
760-744-1150, ext.1722
Office: PSTC, 182 Santar Place, San Marcos
Associate Degree, Certificate of Achievement and Certificate of Proficiency requirements are listed in Section 6 (green pages).
Associate Degrees for transfer IGETC and CSUGE requirements are listed in Section 7 (green pages).
For transfer information, consult a Palomar College Counselor.

COURSE OFFERINGS

Courses numbered under 100 are not intended for transfer credit.

AJ 65   Preparation for Law Enforcement   (3)
3 hours lecture
Note: *Pass/No Pass 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 92   Basic Police Academy III   (19)
16 hours lecture - 9 hours laboratory
Prerequisite: *A minimum grade of 'C' in AJ 91*
Note: *May not be taken for Pass/No Pass Grading; may not be taken as an audit*
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 93 **Basic Police Academy Module III** **(8)**
6 hours lecture – 6 hours laboratory
Prerequisite: *Admission to the Police Academy*
Equivalent to Module III extended-format training standards as set forth by the Commission on Peace Officer Standards and Training (POST). Covers ethics, the criminal justice system, laws of arrest, search and seizure, custody, firearms, arrest and control, first aid/CPR, and other related police topics. Meets the requirements for appointment as a Level III Reserve Officer.

AJ 94A **Basic Police Academy Module IIA** **(7)**
5 hours lecture - 6 hours laboratory
Prerequisite: *Admission to the Police Academy*
AJ 94A and 94B are equivalent to Basic Course Module II extended-format training standards as set forth by the Commission on Peace Officer Standards and Training (POST). Covers property crimes, crimes against persons, policing in the community, firearms, chemical agents, and other related police topics. AJ 94A and 94B meet the requirements for appointment as a Level II Reserve Officer.

AJ 94B **Basic Police Academy Module IIB** **(7)**
5 hours lecture - 6 hours laboratory
Prerequisite: *Admission to the Police Academy*
AJ 94A and 94B are equivalent to the Basic Course Module II extended-format training standards as set forth by the Commission on Peace Officer Standards and Training (POST). Covers report writing, cultural diversity and discrimination, preliminary investigation, evidence, crimes in progress, and other related police topics. AJ 94A and 94B meet the requirements for appointment as a Level II Reserve Officer.

AJ 95A **Basic Police Academy Module IA** **(8.5)**
7 hours lecture – 4½ hours laboratory
Prerequisite: Admission to the Police Academy
AJ 95A and 95B are equivalent to the Basic Course Module I extended-format training standards as set forth by the Commission on Peace Officer Standards and Training (POST). Covers crimes against children, sex crimes, juvenile law, domestic violence, gang awareness, vehicle pullovers, and other related police topics. AJ95A and 95B meet the requirements for appointment as a full-time peace officer or Level I Reserve Officer.

AJ 95B **Basic Police Academy Module IB** **(13)**
8 hours lecture - 15 hours laboratory
Prerequisite: Admission to the Police Academy
AJ 95A and 95B are equivalent to the Basic Course Module I extended format training standards as set forth by the Commission on Peace Officer Standards and Training (POST). Covers emergency management, traffic enforcement and collision investigation, controlled substances, lifetime fitness, arrest and control, vehicle operations, and other related police topics. AJ 95A and 95B meet the requirements for appointment as a full-time peace officer or Level I Reserve Officer.

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 and/or laboratory may be scheduled by the department. Refer to Class Schedule.
Note: *May not be taken for Pass/No Pass Grading*
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*
C-ID AJ 110
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*
C-ID AJ 124
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*
C-ID AJ 122
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*
C-ID AJ 160
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*
C-ID AJ 120
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 106 **Police Ethics** **(3)**
3 hours lecture
Transfer acceptability: *CSU*
Designed to enable the student to explore and understand the potential ethical dilemmas that may confront administration of justice professionals. Morality, ethics, justice and law will be studied from the perspective of a criminal justice professional.

AJ 110 **Basic Criminal Investigation** **(3)**
3 hours lecture
Transfer acceptability: *CSU*
C-ID AJ 140
Fundamentals of investigation, search, collection and preservation of physical evidence, scientific aids, modus operandi, source of information, interviews and interrogations, and incident reporting.

AJ 115 **Patrol Procedures** **(3)**
3 hours lecture
Transfer acceptability: *CSU*
Responsibilities, techniques, and methods of police patrol.

AJ 131 **Juvenile Justice** **(3)**
3 hours lecture
Transfer acceptability: *CSU*
C-ID AJ 220
The organization, functions, and jurisdiction of juvenile agencies; the processing and detention of juveniles; juvenile case disposition; and juvenile statutes and court procedures. Includes youth subcultures and delinquency and the varied philosophies underlying their existence.

AJ 140 **Criminal Justice in the 21st Century–**
Field Study **(1.5)**
4½ hours laboratory
Transfer acceptability: *CSU*
This course will be a study of local, state and federal courts, correctional institutions and law enforcement agencies. Knowledge will be obtained by site visitations, personal interviews and tours.

AJ 141   Enforcement Psychology   (3)
3 hours lecture
Transfer acceptability: CSU
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 151   Introduction to Terrorism   (3)
3 hours lecture
Transfer acceptability: CSU
This course is designed to educate the student in the enforcement issues and future of terrorism around the world. Domestic and international terrorism will be covered. This course will assist the student in obtaining employment in the field of Law Enforcement and Homeland Security.

AJ 152   Weapons of Mass Destruction   (3)
3 hours lecture
Transfer acceptability: CSU
A description of actions required in response to a Weapons of Mass Destruction (WMD) event. Instructions for all levels of responders. Discussions include early warning systems, intelligence gathering, roles of various law enforcement agencies, public health threats, and identification of terrorist individuals and groups.

AJ 153   Issues in Homeland Security   (3)
3 hours lecture
Transfer acceptability: CSU
A description of the Homeland Security Agency, its mission, structure and roles. Discussions include future planning and strategies that address intelligence gathering and assessment of information from domestic and international threats.

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 and/or laboratory may be scheduled by the department. Refer to Class Schedule.
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
Transfer acceptability: CSU
C-ID AJ 150
Introduces various specialized disciplines including the following: 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
Transfer acceptability: CSU
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.

Africana Studies (AS)

See also Multicultural Studies

Contact the Multicultural Studies Department for further information.
760-744-1150, ext. 2206
Office: MD-354
For transfer information, consult a Palomar College Counselor.

COURSE OFFERINGS

AS 100   Introduction to African American Studies   (3)
3 hours lecture
Transfer acceptability: CSU; UC
This course is an overview of the African American Studies (or Black Studies) discipline, including its social and academic origins, goals, and development. Emphasis is placed on understanding the fundamental areas of study within the field and on the interdisciplinary approach to studying the African American experience and cultural production.

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 U.S. from Africa through Reconstruction with emphasis on the trans-Atlantic slave trade; colonial period; relations between African Americans and Native Americans; African Americans, Native Americans, whites and the creation of "race"; development of plantation system, slavery; gender specific oppression; African Americans, Native Americans, and the Revolution; the constitution; free African Americans in North and South, emerging class distinctions and African American cultures; westward expansion; emergence of sectionalism; African American and white women and abolitionism in the context of the Great Awakening; the anti-slavery movement, including relations to the women rights movement; the American West and connections between Mexican/American and African American history; African Americans and the Civil War; Reconstruction and post-war adjustments, including role of the African American middle class and working class.

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, e.g. segregation, repression, community formation; the Westward Movement; African Americans and Native Americans; industrial development; impact of World Wars I and II on urbanization and social mobility; Great Migration; activism; expansion of government activity; Civil Rights Era and modern militancy; relations with Latinos/as and other ethnic/racial groups; post-Civil-Rights era and debates about black identity, black gender identities, women's rights, LGBTQ rights, class differentiation; Black identity in the 21st century.

**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 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.

Air Conditioning, Heating and Refrigeration (ACR)

Contact the Trade and Industry Department for further information.
760-744-1150, ext. 2545
Office: T-102A

Associate Degree, Certificate of Achievement and Certificate of Proficiency requirements are listed in Section 6 (green pages).

COURSE OFFERINGS

ACR 101   Air Conditioning, Heating, and Refrigeration:
               Mechanical   (3)
1½ hours lecture - 4½ hours laboratory
Transfer acceptability: *CSU*
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.

ACR 102   Air Conditioning, Heating, and Refrigeration:
               Electrical   (3)
1½ hours lecture - 4½ hours laboratory
Transfer acceptability: *CSU*
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.

ACR 103   Air Conditioning, Heating, and Refrigeration:
               Heating   (3)
1½ hours lecture - 4½ hours laboratory
Recommended Preparation: *ACR 101, ACR 102*
Transfer acceptability: *CSU*
Applied theory and principles used for the different types of heating systems for personal comfort and general purpose heating. Course topics include gas, electrical, solar, reverse refrigeration cycle heat pumps. Theory and application of dual fuel heating systems and oil heat. Course will prepare students to use proper tools and test test equipment to install, trouble shoot, evaluate and perform appropriate corrective action and repairs.

ACR 105   Refrigerant Management and Recovery   (1)
½ hour lecture - 1½ hours laboratory
Transfer acceptability: *CSU*
History, theory and 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.

ACR 110   Advanced Air Conditioning,
               Heating and Refrigeration   (3)
1½ hours lecture - 4½ hours laboratory
Prerequisite: *ACR 101, and ACR 102*
Transfer acceptability: *CSU*
Theory, advanced principles and techniques of air conditioning and refrigeration. EPA regulations and safety requirements; complex control systems; chilled water systems, associated pumps and piping; and the installation, troubleshooting, repair, and maintenance of residential and small commercial units.

ACR 112   HVAC Controls and Automation   (3)
1½ hours lecture - 4½ hours laboratory
Prerequisite: *ACR 102*
Recommended Preparation: *ACR 101*
Transfer acceptability: *CSU*
Introduction to applied theory, principles, techniques and history used in Building Automation to monitor and control Heating, Ventilation and Air Conditioning (HVAC) systems to maintain personnel comfort, Indoor Air Quality (IAQ) and system efficiency. Course topics include Direct Digital Controls (DDC), programmable controllers, configurable controllers, multi-zone systems, communication protocols, control system monitoring and economizers to reduce energy usage.

Alcohol and Other Drug Studies (AODS)

Contact the Program Coordinator for further information.
760-744-1150, ext. 2188
Offices: MD-243
Associate Degree, Certificate of Achievement and Certificate of Proficiency requirements are listed in Section 6 (green pages).
For transfer information, consult a Palomar College Counselor.

COURSE OFFERINGS

AODS 140   Introduction to Psychological and
               Social Services   (4)
3 hours lecture - 3 hours laboratory
Note: *Cross listed as PSYC 140/SOC 140*
Transfer acceptability: *CSU*
Supervised internship in a human service agency or an alcohol and other drug treatment facility. An overview of the field of human services, including alcohol and other drug treatment. The roles of psychologists, sociologists, social workers, family therapists, social service assistants and addiction counselors are compared and contrasted, and the issues they deal with are described. Through cooperative efforts of provider agencies, the instructor, and the student, the skills utilized for entry-level employment are observed, practiced, and evaluated under supervision.

AODS 150   Introduction to Alcohol and Other Drug Studies   (3)
3 hours lecture
Note: *Cross listed as PSYC 150/SOC 150*
Transfer acceptability: *CSU*
Examines alcohol, tobacco and psychoactive drugs in society. Biological, psychological and socio-cultural factors of drug abuse and dependence will be explored. The impact of addiction on families and society; contemporary treatment techniques, and the addiction counseling profession will be covered.

AODS 155   The Physiology and Pharmacology of
               Psychoactive Drugs   (3)
3 hours lecture
Note: *Cross listed as PSYC 155/SOC 155*
Transfer acceptability: *CSU*
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 long-term affective, behavioral, cognitive, biological, and social consequences of psychoactive drug use will be explored, including disorders such as Korsakoff's syndrome and other nutritional deficiencies.

AODS 160   Prevention, Intervention, and Education   (3)
3 hours lecture
Note: *Cross listed as PSYC 160/SOC 160*
Transfer acceptability: *CSU*
This course will review historical and contemporary approaches for chemical dependency, including prevention, intervention, and education. It will analyze the progression of substance abuse and chemical dependency disorders and will evaluate types of prevention, education, and intervention strategies.

AODS 250   Group Leadership and Process   (3)
3 hours lecture
Note: *Cross listed as PSYC 250/SOC 250*
Transfer acceptability: *CSU*
An introduction to the dynamics of group interaction, with emphasis upon the individual's firsthand experience as the group studies itself under supervision. 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.

AODS 255   Case Management, Law and Ethics   (3)
3 hours lecture
Note: *Cross listed as PSYC 255/SOC 255*
Transfer acceptability: *CSU*
This course reviews the principles and practice of case management in addiction treatment including the processes of intake, screening, assessment, treatment planning, referral, and documentation. Professional and ethical codes of conduct and behavior are also reviewed and emphasized.

AODS 260   Chemical Dependency Family Counseling   (3)
3 hours lecture
Note: *Cross listed as PSYC 260/SOC 260*
Transfer acceptability: *CSU*
This course is designed to explore methods of assisting family members and others to understand and to cope with the alcohol and drug abuse of alcoholics and addicts. Several family therapy modalities will be explored. The approach will be experiential in format and students will participate in exercises that lead to the development of these skills.

AODS 298   Directed Field Experience I   (5)
3 hours lecture - 6 hours laboratory
Note: *Cross listed as PSYC 298/SOC 298*
Transfer acceptability: *CSU*
Supervised internship in a human service agency or an alcohol and other drug treatment facility. The student intern will have an opportunity to observe human service providers working with clients in agency settings. Ethical guidelines for helping professions, developing cultural competence, stages of change and motivational interviewing as a helping style are discussed. Interns practice interviewing skills for increasing motivation for positive change.

AODS 299   Directed Field Experience II   (6)
3 hours lecture - 9 hours laboratory
Prerequisite: *A minimum grade of 'C' in AODS 140/SOC 140/PSYC 140 or AODS 298/SOC 298/PSYC 298 and AODS/250/SOC 250/PSYC 250 and AODS 255/SOC 255/PSYC 255*
Note: *Cross listed as PSYC 299/SOC 299*
Transfer acceptability: *CSU*
Supervised internship in an alcohol and other drug treatment facility. This course emphasizes advanced concepts in chemical dependency. Students refine their skills for the 12 core functions of effective clinical practice and compile a professional portfolio in preparation for the state certifying written exam. This course meets the 45-hour supervised practicum requirement for the California Certification Board of Alcohol and Drug Counselors.

American Indian Studies (AIS)

Contact the American Indian Studies Department for further information.
760-744-1150, ext. 2425
Office: MD-140
Associate Degree, Certificate of Achievement and Certificate of Proficiency requirements are listed in Section 6 (green pages).
For transfer information, consult a Palomar College Counselor.

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 U.S. and state political systems and institutions. Includes an examination of tribal government 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 American Indian communities.

AIS 104   The Music of Native America   (3)
3 hours lecture
Transfer acceptability: *CSU; UC*
Surveys both the traditional and contemporary Native American musical styles with an emphasis on North America. The impacts of Western influence are examined through the socio-cultural context of Native music.

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 107A   Elementary Luiseño IA   (3)
3 hours lecture
Transfer acceptability: *CSU; UC*
This elementary level course is a study of 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 107B   Elementary Luiseño IB   (3)
3 hour lecture
Prerequisite: *AIS 107A*
Transfer acceptability: *CSU; UC*
This elementary course is a continuation of AIS 107A and reviews 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 108A   Elementary Luiseño IIA   (3)
3 hours lecture
Prerequisite: *AIS 107B*
Transfer acceptability: *CSU; UC*
This course is an elementary review of grammar, composition, and continued oral practice.

AIS 108B   Elementary Luiseño IIB   (3)
3 hours lecture
Prerequisite: *AIS 108A*
Transfer acceptability: *CSU; UC*
This elementary course is a continued review of grammar, composition, and oral practice.

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 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 ethnocentricism 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. Develop a dynamic comparative grid, focusing on the persistence of tribal identities and evolution of socio-economic changes and cultural practices over time; Special emphasis on Southern California.

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 146   American Indian Theatre, Dance and Music   (3)
3 hours lecture
Transfer acceptability: _CSU; UC_
A survey of the works of Native Americans in theatre, dance and music. Examines how changes in Native and Euro-American pop culture have affected the way in which Native performers represent their art, traditions, and cultural expressions.

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
Transfer acceptability: _CSU; UC_
Elementary grammar, composition, and oral practice.

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 166A   Elementary Cahuilla IA   (3)
3 hours lecture
Transfer acceptability: _CSU; UC_
An introduction to the fundamentals of the Cahuilla language, one of the four indigenous languages of San Diego County. Includes a survey of Cahuilla language phonology, morphology, syntax and grammar with special emphasis on culturally relevant terminology.

AIS 166B   Elementary Cahuilla IB   (3)
3 hours lecture
Prerequisite: _A minimum grade of 'C' in AIS 166A_
Transfer acceptability: _CSU; UC_
This elementary course is a continuation of AIS 166A and reviews the phonology, morphology, syntax and grammar of the Cahuilla Language, with continued emphasis on culturally relevant terminology leading to increased proficiency in expressing basic concepts both orally and in writing.

AIS 167A   Elementary Cahuilla IIA   (3)
3 hours lecture
Prerequisite: _A minimum grade of 'C' in AIS 166B_
Transfer acceptability: _CSU; UC_
The first half of the second year of Elementary Cahuilla. Reviews the phonology, morphology, syntax and grammar of the Cahuilla language, with continued emphasis on culturally relevant terminology to increase proficiency in expressing basic concepts both orally as well as in writing.

AIS 167B   Elementary Cahuilla IIB   (3)
3 hours lecture
Prerequisite: _A minimum grade of 'C' in AIS 167A_
Transfer acceptability: _CSU; UC_
The second half of the second year of elementary Cahuilla. Reviews the phonology, morphology, syntax and grammar of the Cahuilla Language, with continued emphasis on culturally relevant terminology leading to increased proficiency in expressing basic concepts both orally and in writing.

AIS 180A   Uto-Aztecan Languages of San Diego County IA   (3)
3 hours lecture
Transfer acceptability: _CSU/UC pending_
This elementary level course is a study of the fundamentals of the Uto-Aztecan language, reflective of the indigenous languages in San Diego County. This course will include a survey of Uto-Aztecan language phonology, morphology, syntax and grammar with emphasis on the development of communicative skills in a cultural context through listening, speaking, reading and writing.

AIS 180B   Uto-Aztecan Languages of San Diego County IB   (3)
3 hours lecture
Prerequisite: _A minimum grade of 'C' in AIS 180A_
Transfer acceptability: _CSU/UC pending_
This elementary course is a continuation of AIS 180A and reviews the phonology, morphology, syntax and grammar of the Uto-Aztecan Language, with continued emphasis on the development of communicative skills in a cultural context through listening, speaking, reading and writing in analyzing and utilizing both contemporary as well as culturally relevant terminology leading to increased proficiency in expressing basic concepts both orally and in writing.

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 and/or laboratory may be scheduled by the department. Refer to Class Schedule.
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.

AIS 207A   Luiseno IIIA   (3)
3 hours lecture
Prerequisite: *AIS 108B*
Transfer acceptability: *CSU/UC*
This intermediate level course is a study of the Luiseno language and culture(s), focusing on intermediate level culturally relevant authentic materials. Emphasis is on developing listening, oral, reading and writing skills in order to acquire proficiency in Luiseno.

AIS 207B   Luiseno IIIB   (3)
3 hours lecture
Prerequisite: *AIS 207A*
Transfer acceptability: *CSU/UC*
This intermediate level course is a continuation of the study of the language and culture of the Luiseno people emphasizing oral, listening, and reading skills.

AIS 266A   Cahuilla IIIA   (3)
3 hours lecture
Prerequisite: *AIS 167B*
Transfer acceptability: *CSU; UC*
The first half of the first year of intermediate Cahuilla language and culture, focusing on intermediate-level culturally relevant authentic materials. Emphasis is on developing listening, oral, reading and writing skills in order to acquire proficiency in Cahuilla.

AIS 266B   Cahuilla IIIB   (3)
3 hours lecture
Prerequisite: *AIS 266A*
Transfer acceptability: *CSU; UC*
The second half of the first year of intermediate Cahuilla. A continuation of the study of the language and culture of the Cahuilla people, focusing on oral, listening, and reading skills. Culturally relevant authentic materials are incorporated to acquire proficiency in Cahuilla. Largely conducted in Cahuilla.

AIS 295   Directed Study in American Indian Studies   (1, 2, 3)
3, 6, or 9 hours laboratory
Transfer acceptability: *CSU; UC - Credit determined by UC upon review of course syllabus.*
Independent study for students with demonstrated proficiency in American Indian Studies to engage in self-directed projects or research outside the context of regularly scheduled classes. Studies are supervised by an instructor.

American Sign Language (ASL)

Contact the Speech Communication/Forensics/ASL Department for further information.
760-744-1150, ext. 2405
Office: H-201J
Associate Degree, Certificate of Achievement and Certificate of Proficiency requirements are listed in Section 6 (green pages).

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 and/or laboratory may be scheduled by the department. Refer to Class Schedule.
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)   (.5, 1)
1½ - 3 hours laboratory
Prerequisite: *A minimum grade of 'C' in ASL 100, or concurrent enrollment in ASL 100*
Note: *Pass/No Pass grading only*
Transfer acceptability: *CSU*
Individualized program intended for students who wish to practice, use, and improve their beginning ASL skills. Video, software, and workbooks in the American Sign Language/English Interpreting Lab can help students improve understanding of basic ASL sentences and stories. Through the use of video recording equipment, students will have the opportunity to practice 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: *A minimum grade of 'C' in ASL 100*
Transfer acceptability: *CSU; UC*
Continued development in American Sign Language.

ASL 101L   American Sign Language II (Lab)   (.5, 1)
1½ - 3 hours laboratory
Prerequisite: *A minimum grade of 'C' in ASL 101, or concurrent enrollment in ASL 101*
Note: *Pass/No Pass grading only*
Transfer acceptability: *CSU/UC*
Individualized program intended for students who wish to practice, use, and improve advanced-beginning ASL skills. Video, software, and workbooks in the American Sign Language/English Interpreting Lab can help students improve understanding of basic ASL sentences and stories. Through the use of video recording equipment, students will have the opportunity to practice expressive signing skills. Lab activities are designed to provide students the opportunity to practice vocabulary and syntax taught in ASL 101.

ASL 105   Fingerspelling and Number Systems   (3)
3 hours lecture
Prerequisite: *A minimum grade of 'C' in ASL 100*
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*
A general orientation to the Deaf community with an overview of the historical, linguistic, philosophical, psychological, educational and social aspects 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 and/or laboratory may be scheduled by the department. Refer to Class Schedule.
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: A minimum grade of 'C' in ASL 101
Transfer acceptability: CSU; UC

Intermediate language, phrasing, and communication skills in American Sign Language. Each ASL level consists of additional instruction in vocabulary, grammar and phrasing, receptive and expressive skills development and an ever continuing awareness/understanding of American Deaf Culture whose language is ASL.

ASL 205L   American Sign Language III (Lab)   (.5, 1)
1½ - 3 hours laboratory
Prerequisite: A minimum grade of 'C' in ASL 205, or concurrent enrollment in ASL 205
Note: Pass/No Pass grading only
Transfer acceptability: CSU/UC

Individualized program intended for students who wish to practice, use, and improve advanced-beginning ASL skills. Video, software, and workbooks in the American Sign Language/English Interpreting Lab can help students improve understanding of beginning-intermediate ASL sentences and stories. Through the use of video recording equipment, students will have the opportunity to practice beginning-intermediate expressive signing skills. Lab activities are designed to provide students the opportunity to practice vocabulary and syntax taught in ASL 205. 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: A minimum grade of 'C' in ASL 205
Coerequisite: ASL 206L
Transfer acceptability: CSU; UC

This class focuses on advanced language, phrasing, and communication skills in American Sign Language along with continued development of Deaf cultural awareness and cross-cultural functionality. Students will adhere to Deaf cultural values and communication norms to negotiate signing environments. Eye contact when signing with a partner is critical. In addition to activities and conversation practice, students can use technology and workbooks to demonstrate and assess use of basic ASL grammar. Lab activities are designed to provide students the opportunity to practice vocabulary and grammar taught in ASL 205 while adhering to Deaf communication norms. At this level, students will practice interactions with peers as well as with the teacher or members of the Deaf community. Students will be introduced to the features important for more formal presentations of narratives or short expository explanations that compare, contrast, and/or explain issues.

ASL 206L   American Sign Language IV (Lab)   (.5)
1½ hours laboratory
Note: Grade/Pass/No Pass
Transfer acceptability: CSU

Conversation practice designed to use and improve ASL skills. Video, computer programs, games, activities, and workbook exercises support development of intermediate ASL sentences and stories. Students will have the opportunity to practice intermediate expressive signing skills in pairs, small groups, and whole class discussions. Lab activities are designed to provide students the opportunity to practice vocabulary and syntax taught in second year ASL classes.

ASL 208   Interpreting as a Profession   (3)
3 hours lecture
Prerequisite: A minimum grade of 'C' in ASL 206
Transfer acceptability: CSU

This course is designed to develop insights about the profession of interpreting. Topics covered may include, but are not limited to, the history of the field, cross-cultural dynamics, national testing standards, preparation for certification, and knowledge of situational and professional ethics.

ASL 210   Discourse Analysis   (4)
4 hours lecture
Prerequisite: A minimum grade of 'C' in ASL 206
Corequisite: ASL 210L
Recommended preparation: ASL 110, ENG 100 and ASL 115
Transfer acceptability: CSU

This course provides the foundational knowledge and skills necessary to perform ASL-English translation and interpreting tasks. Emphasis will be on developing proficiencies of professional discourse and analysis of both American Sign Language and English discourse in a variety of registers. Through evidence-based analysis of ASL and English texts and/or ASL-English translations, the effectiveness of interpreting work samples will be evaluated using terminology conventional within the interpreting profession. Primary language of instruction for class lectures and discussion will be ASL.

ASL 210L   Discourse Analysis Lab   (1)
3 hours laboratory
Prerequisite: ASL 206
Transfer acceptability: CSU

The ability to interact professionally and demonstrate effective presentation skills in all working languages is fundamental to effective translation and interpretation. Media available on campus and online will enable students to develop proficiencies in ASL and in English. In this course, students will utilize technology to create accessible videos and to analyze linguistic features of discourse in ASL and/or in English.

ASL 211   Interpreting II   (4)
4 hours lecture
Prerequisite: A minimum grade of 'C' in ASL 208, ASL 110, and ASL 210
Corequisite: ASL 211L
Recommended preparation: ENG 100
Transfer acceptability: CSU

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. Skills learned will be applied 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 211L   Interpreting II Lab   (1)
3 hours laboratory
Corequisite: ASL 211

Utilize technology and community resources to develop beginning-intermediate interpreting skills, American Sign Language and/or English language proficiencies, and understanding of and respect for Deaf cultural values.

ASL 215   Interpreting III   (4)
4 hours lecture
Prerequisite: *A minimum grade of 'C' in ASL 211*
Corequisite: *ASL 215L*
Recommended preparation: *ASL 220, ENG 100*
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 215L   Interpreting III Lab   (1)
3 hours laboratory
Corequisite: *ASL 215*
Transfer acceptability: *CSU*
Utilize technology and community resources to develop beginning-intermediate interpreting skills, American Sign Language and/or English language proficiencies, and understanding of and respect for Deaf cultural values.

ASL 216   Interpreting IV   (4)
4 hours lecture
Prerequisite: *A minimum grade of 'C' in ASL 215*
Corequisite: *ASL 298*
Recommended preparation: *ENG 100*
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 216L   Interpreting IV Lab   (1)
3 hours laboratory
Corequisite: *ASL 216*
Transfer acceptability: *CSU*
Utilize technology and community resources to develop intermediate interpreting skills, American Sign Language and/or English language proficiencies, and understanding of and respect for Deaf cultural values.
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 by making principled choices about meaning and impact.

ASL 220   Specialized Settings of Interpreting   (3)
3 hours lecture
Prerequisite: *A minimum grade of 'C' in ASL 206, 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)
4½ hours laboratory
Prerequisite: *A minimum grade of 'C' in ASL 216, or concurrent enrollment in ASL 216*
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
Office: MD-140
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 105   American West: Images and Identities   (3)
3 hours lecture
Transfer acceptability: *CSU; UC*
The study and exploration of the unique role of the American West in shaping Native American and immigrant cultures is revealed through varied images in visual arts, literature, and music. These images, from deep spiritual metaphors to progressive impulses, influenced American values and dreams that prevail into today's global arena. Students will examine and analyze various primary sources available through archives and virtual exhibits.

AMS 182   Introduction to Arts Management   (3)
9 hours laboratory
Note: *Cross listed as ART 182/DNCE 182/MUS 182/ 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: *A minimum grade of 'C' in ART/DANCE/MUS or TA 182*
Note: *Cross listed as ART 183/DNCE 183/MUS 183/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/SOC 200*
Transfer acceptability: *CSU; UC – AMS/MCS/SOC 200 combined: maximum credit, one course*
C-ID SOCI 150
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
Office: MD-261
Associate Degree, Certificate of Achievement and Certificate of Proficiency requirements are listed in Section 6 (green pages).

COURSE OFFERINGS

ANTH 100   Introduction to Biological Anthropology   (3)
3 hours lecture
Note: Not open to students with prior credit in ANTH 101
Transfer acceptability: CSU; UC – ANTH 100/100L and 101 combined: max credit, 4 units
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 Biological Anthropology Laboratory   (1)
3 hours laboratory
Note: Not open to students with prior credit in ANTH 101
Prerequisite: A minimum grade of 'C' in ANTH 100, 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 101   Introduction to Biological Anthropology   (4)
3 hours lecture - 3 hours laboratory
Note: Not open to students with prior credit in ANTH 100 or 100L
Transfer acceptability: CSU; UC
The lecture and laboratory course provides an introduction to the methods and techniques used in research in 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
C-ID ANTH 120
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 107   Language and Culture   (3)
3 hours lecture
Transfer acceptability: CSU; UC
An introduction to linguistic anthropology, the study of language, culture and society from an anthropological perspective. Topics include the biology of language, anthropological theories of language origin, language structure, the relationship between language and culture, language variation, and nonverbal communication.

ANTH 110   Introduction to Archaeology   (3)
3 hours lecture
Transfer acceptability: CSU; UC
C-ID ANTH 150
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 121   Cultural Resource Management   (3)
3 hours lecture
Recommended preparation: ANTH 120
Transfer acceptability: CSU
The historical, legal, and operational contexts of Cultural Resource Management (CRM or Applied Archaeology). Historical and legal contexts focus on key legislation, such as the National Historic Preservation Act and the California Environmental Quality Act. The operational context focuses on the phases of CRM research in the context of technological innovations, budget and time constraints, Native American consultation, and the goals of CRM technical reports.

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, Witchcraft, and Religion   (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 137　Medical Anthropology: Culture, Illness and Healing　(3)
3 hours lecture
Transfer acceptability: CSU
This course is a cross-cultural survey of health, illness and healing in small-scale societies as well as modern societies from a cultural, biological, and ecological perspective. Topics covered include perceptions of the body, perceptions of disease, life phases, culture-specific syndromes, healing practices, healers, nutrition, and healing and medical systems.

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. Develop a dynamic comparative grid, focusing on the persistence of tribal identities and evolution of socio-economic changes and cultural practices over time; Special emphasis on Southern California.

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 197　Topics in Archaeology　(1-3)
3 - 9 hours laboratory
Transfer acceptability: CSU
Topics in Archaeological Research. See Class Schedule for specific topic offered. Course title will designate subject covered.

ANTH 205　Prehistoric Archaeological Excavation　(3)
1 hour lecture - 6 hours laboratory
Recommended preparation: ANTH 120
Transfer acceptability: CSU
Training in excavating prehistoric archaeological features. Specialized field techniques for prehistoric archaeology. Archaeological theory as it applies to site interpretation.

ANTH 206　Historical Archaeological Excavation　(3)
1 hour lecture - 6 hours laboratory
Transfer acceptability: CSU; UC
Training in excavating historic archaeological features. Specialized field techniques in historical archaeology. Archaeological theory as it applies to historic site interpretation.

ANTH 210　Archaeological Surveying　(3)
2½ hours lecture - 1½ hours 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)
2½ hours lecture - 1½ hours laboratory
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)
2½ hours lecture - 1½ hours 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)
2½ hours lecture - 1½ hours laboratory
Recommended preparation: ANTH 120
Note: May not be taken for Pass/No Pass grading
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
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
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.

ANTH 298　Internship in Archaeology　(1-3)
3 3/4-12 1/2 hours laboratory
Supervised internship in a government agency, private firm or museum. The student intern will have the opportunity to participate in the excavation and/or analysis, processing, and documentation of archaeological collections.

Apprenticeship Training (AP)
Acoustical Installer, Carpentry, Drywall/Lather, Electrician, Inside Wireman, Plasterer, Sheet Metal, Sound and Communication Systems, Sound Technician

Contact Occupational & Noncredit Programs for further information.
760-744-1150, ext. 2600
Office: AA-135
Associate Degree, Certificate of Achievement and Certificate of Proficiency requirements are listed in Section 6 (green pages).

COURSE OFFERINGS

AP AC 701　Orientation　(1.5)
1 hour lecture - 1½ hours laboratory
Prerequisite: Indentured apprentice to a designated Joint Apprenticeship and Training Committee
Note: Cross listed as AP DL 701/AP PL 701
An introduction to the Interior Systems program. Safe and proper use of hand tools, power tools, trade related math, beginning print reading and layout as well as safety certifications. Certifications will include scaffold erector/dismantler (welded frame) and low velocity powder actuated tools.

AP AC 702　Safety and Health Certifications　(1.5)
1 hour lecture - 1½ hours laboratory
Note: Cross listed as AP AC 702/AP C 702/AP DL 702/AP PL 702
Instruction in safety and health training that meets the needs of the Interior Systems industry. Content includes certification in Power Industrial Trucks, Aerial Lift, American Red Cross First Aid / CPR/ AED, and OSHA 10.

AP AC 703   Printreading   (1.5)
1 hour lecture - 1½ hours laboratory
Note: Cross listed as AP DL 703/AP PL 703
An introduction to the basic visualization skills needed for reading and interpreting construction prints. Demonstration of the significance of views, elevations and the role of specifications as they relate to prints.

AP AC 704   Advanced Printreading   (1.5)
1 hour lecture - 1½ hours laboratory
Prerequisite: A minimum grade of 'C' in AP AC 703/AP DL 703
Note: Cross listed as AP DL 704
In-depth training for on-the-job print reading situations. Covers advanced layout tasks and solutions to typical construction problems using plans and specifications for commercial construction projects.

AP AC 705   Acoustical Ceilings   (1.5)
1 hour lecture - 1½ hours laboratory
Instruction in acoustical ceilings, seismic codes and the theory behind them. Wall molds and trims, ceiling layout and material identification. Students will install ceilings using the technical knowledge and skills.

AP AC 706   Standard Acoustical Grids   (1.5)
1 hour lecture - 1½ hours laboratory
Designed with classroom instruction but will focus more on acoustical grid installation such as 2 x 4 and 2 x 2 flat AH@ pattern, radius, gable and diagonal ceilings.

AP AC 707   Suspended Ceilings   (1.5)
1 hour lecture - 1½ hours laboratory
Designed with classroom instruction but will focus more on acoustical grid installation such as 2 x 4 and 2 x 2 flat AH@ pattern, radius, gable and diagonal ceilings.

AP AC 708   Soffits   (1.5)
1 hour lecture - 1½ hours laboratory
Focus on square and slant faced, tapered, concealed, drywall suspension and sloped soffits.

AP AC 709   Prefab/Sound Panels   (1.5)
1 hour lecture - 1½ hours laboratory
Focus on the technical knowledge and skills needed for the installation of prefabricated wall and ceiling panel systems. Acoustical principles and the theory of sound will be discussed.

AP AC 710   Concealed/Glue-Up/Staple-Up System   (1.5)
1 hour lecture - 1½ hours laboratory
Instruction in concealed and semi-concealed ceilings and soffits, glue-up and staple-up. Technical knowledge and skills will be demonstrated in assembling these ceilings.

AP AC 711   Designer and Specialty Trims   (1.5)
1 hour lecture - 1½ hours laboratory
This course is a more advanced look at specialty and designer trims for grid ceiling systems. Previous knowledge will be applied when laying out and installing straight and curved trims in soffit and light pocket designs, along with clouds, or free floating, trimmed ceilings.

AP AC 712   Metal Pan and Security Systems   (1.5)
1 hour lecture - 1½ hours laboratory
Focus on the technical knowledge and skills needed to work with these "high end" products.

AP AC 713   Advanced Acoustical Installation   (1.5)
1 hours lecture - 1½ hours laboratory
Prerequisite: Student is a Registered State Indentured Apprentice
Instruction in the materials and methods used for the installation of custom and intricate grid systems. Green building rating systems will be applied to selected acoustical materials.

AP AC 714   Advanced Acoustical Layout   (1.5)
1 hours lecture - 1½ hours laboratory
Prerequisite: Student is a Registered State Indentured Apprentice
Advanced layout methods used to complete complex acoustical system installations. Covers seismic codes and requirements and layout techniques for establishing intricate geometric designs for ceiling grids.

AP AC 715   Drywall Acoustical Ceilings   (1.5)
1 hour lecture - 1½ hours laboratory
Identifies the materials and methods used for the installation of acoustical ceilings. Seismic codes, materials, and requirements are also reviewed. Installation forvarious grid systems will be discussed. Students will use the skills presented tocomplete an acoustical ceiling project as part of this course.

AP AC 797   Acoustical Topics   (.5 - 4)
Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture and/or laboratory may be scheduled by the department. Refer to Class Schedule.
Topics in Acoustical. See Class Schedule for specific topic offered. Course title will designate subject covered.

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.

COURSE OFFERINGS

AP C 701   Orientation   (1.5)
1 hour lecture - 1½ hours laboratory
Introduces 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 702   Safety and Health Certification   (1.5)
1 hour lecture - 1½ hours laboratory
Note: Cross listed as AP AC 702/AP C 702/AP DL 702/AP PL 702
Covers the safe and appropriate use of scaffolds, aerial lift equipment, and emergency response procedures. Successful students will receive UBC Scaffold Erector and Aerial Lift Operator qualification cards. First Aid and CPR certification will be issued upon successful completion of the American Red Cross training provided.

AP C 703   Printreading   (1.5)
1 hour lecture - 1½ hours laboratory
The first of two classes in blueprint reading. Covers the fundamental functions and structure of blueprints. Construction drawings, line symbols, freehand sketching as well as pictorial drawings will be covered.

AP C 704   Advanced Printreading   (1.5)
1 hour lecture - 1½ hours laboratory
Second of two courses in blueprint reading. Covers foundation prints, commercial prints, residential prints and estimating. Construction specifications will also be covered.

AP C 705   Foundation and Flatwork   (1.5)
1 hour lecture - 1½ hours laboratory
Covers the design and function of several types of foundations and concrete flatwork. The methods, techniques and procedures for formwork layout, elevation, and construction will be presented. Jobsite safety, print interpretation, material identification, and basic use of the builders level will be included in the training. Students will construct three selected formwork projects.

AP C 707   Tilt-Up Panel Construction   (1.5)
1 hour lecture - 1½ hours laboratory
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 708   Wall Forming   (1.5)
1 hour lecture - 1½ hours laboratory
Introduces the basic techniques of poured-in-place concrete wood form construction. Related safety, math and blueprint reading will be covered.

AP C 709   Gang Forms/Columns   (1.5)
1 hour lecture - 1½ hours laboratory
Presents the formwork types and construction methods for gang form and column installations. Discussions will cover heavy timber gang forms and use of taper ties, bracing, and bulkhead tables. The course project will include gang and column formwork construction, assembly, and hardware installation tasks. Related safety, math and print reading will be covered in the training.

AP C 710   Patented Forming Systems   (1.5)
1 hour lecture - 1½ hours laboratory
Covers the basic knowledge required to use blueprints for the purpose of properly laying out, locating, "leveling," "plumbing," "squaring" and preparing patented forming systems for concrete work/pours. Poured in place, tilt-up and precast above grade level structural concrete work including structural "load bearing" walls, decks and columns.

AP C 712   Column Forms   (1.5)
1 hour lecture - 1½ hours laboratory
Presents the formwork types and construction methods for column form installations. Discussions will cover structural significance of column layout, squaring, leveling and plumbing. The course project will include column formwork construction, assembly, and hardware installation tasks. Related safety, math and print-reading will be covered.

AP C 713   Beam and Deck Forming   (1.5)
1 hour lecture - 1½ hours laboratory
Introduction to the use of beam and deck forming systems for concrete construction. Students will identify formwork types and installation techniques including calculating materials and setting beam & deck forms. Metal beam forms and capitals will be highlighted. Layout and builders level skills will be used in this class.

AP C 714   Basic Commercial Framing   (1.5)
1 hour lecture - 1½ hours laboratory
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 716   Commercial Floor Framing   (1.5)
1 hour lecture - 1½ hours laboratory
Covers 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 safety and construction math will also be covered.

AP C 717   Basic Stairs   (1.5)
1 hour lecture - 1½ hours laboratory
Stair construction is an integral part of the 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 718   Advanced Stairs   (1.5)
1 hour lecture - 1½ hours laboratory
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 719   Exterior Finish Details   (1.5)
1 hour lecture - 1½ hours laboratory
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 721   Basic Roof Framing   (1.5)
1 hour lecture - 1½ hours laboratory
Roof construction is one of the most challenging and satisfying facets of carpentry. Introduces 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 723   Basic Metal Framing   (1.5)
1 hour lecture - 1½ hours laboratory
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 725   Transit Level/Laser   (1.5)
1 hour lecture - 1½ hours laboratory
Addresses form design, material estimating and problems relative to form construction. Related safety, math and blueprint reading will be covered.

AP C 726   Bridge Construction   (1.5)
1 hour lecture - 1½ hours laboratory
Provides students with an overview of basic bridge construction. Descriptions for exterior and interior girders, edge forms, bulkheads and hinge forms will be presented. Formwork project will include panel construction, assembly, and hardware installation tasks. Related safety, math and print reading will be covered in the training.

AP C 727   Stair and Ramp Forming   (1.5)
1 hour lecture - 1½ hours laboratory
Designed to teach the various techniques used to form stairs and ramp structures. Related safety, math and blueprint reading will be covered.

AP C 728   Stair Trim   (1.5)
1 hour lecture - 1½ hours laboratory
Covers how various trims are utilized to finish stair construction design features. Product styles, characteristics, applications, and installation methods are included in the discussions. The tools and techniques for cutting and installing selected trim types are presented and practiced throughout the training.

AP C 729   Cabinet Millwork and Assembly   (1.5)
1 hour lecture - 1½ hours laboratory
Introduction to basic cabinet construction. Blueprint and finish schedules will be covered as well as related safety and math.

AP C 730   Cabinet Installation   (1.5)
1 hour lecture - 1½ hours laboratory
Installation of base and wall-hung cabinets, scribing techniques, and how to read blueprint and finish schedules. Related safety and math will also be covered.

AP C 735   Molding and Trim   (1.5)
1 hour lecture - 1½ hours laboratory
Introduction to various moldings and the specific installation techniques of each. Blueprint, finish schedules, related safety and math will also be covered.

AP C 736   Plastic Laminates   (1.5)
1 hour lecture - 1½ hours laboratory
Covers manufactured product styles, characteristics, and countertop applications. Materials used as countertop and backsplash substrates are discussed. Construction procedures and installation methods are presented, and students will apply the techniques to produce and install a plastic laminate countertop with backsplash.

AP C 737   Door and Door Frames   (1.5)
1 hour lecture - 1½ hours laboratory
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 739   Door and Door Hardware   (1.5)
1 hour lecture - 1½ hours laboratory
Prerequisite: *Student is a Registered State Indentured Apprentice*
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 745   Commercial Fixtures   (1.5)
1 hour lecture - 1½ hours laboratory
Includes print interpretation and fabrication techniques used in the preparation and installation of commercial store fixtures. An emphasis will be placed on accurate measuring, proper hand and power tool use, and safety. Students will calculate materials to create cut lists, and fabricate, assemble and install wall panel and valance fixtures.

AP C 747   Basic Suspended Scaffold   (1.5)
1 hour lecture - 1½ hours laboratory
Basic techniques and procedures associated with suspended scaffolds. The terminology and use of scaffold components in a cable suspended configuration will be the focus of this training. Construction practices and safety will be taken into consideration as students erect equipment using project design plans for this cable suspended scaffold.

AP C 748   Advanced Suspended Scaffold   (1.5)
1 hour lecture - 1½ hours laboratory
Advanced techniques and procedures required when constructing suspended scaffolds supported by structural members. Students will identify the suitable structural components for this application type. The methods used to determine load bearing capability of structural elements will be presented. The hazards and precautionary techniques associated with safely building this type of suspended platform will be the focus of this training.

AP C 749   Basic Systems Scaffold   (1.5)
1 hour lecture - 1½ hours laboratory
Basic techniques and procedures associated with systems scaffold components. Terminology and components unique to this category of equipment will be discussed. Construction practices and safety considerations will be a major focus of the class. Students will identify and erect equipment using the custom configurations for jobsites where this type of scaffold is most frequently utilized.

AP C 750   Intermediate Systems Scaffold   (1.5)
1 hour lecture - 1½ hours laboratory
Includes application of cantilevered design methods used to safely erect platforms extending beyond a typical scaffold base arrangement. Students will apply methods and erect equipment using custom configurations for jobsites.

AP C 751   Advanced Systems Scaffold   (1.5)
1 hour lecture - 1½ hours laboratory
Covers the advanced techniques and procedures required when constructing system scaffolds used in industrial boiler installation or repair applications. Students will apply common solutions for bridging voids and following equipment contours to construct the selected industrial simulated scaffold projects.

AP C 752   Basic Frame Scaffold   (1.5)
1 hour lecture - 1½ hours laboratory
Covers terminology, components and the basic techniques and procedures associated with frame scaffold components. Construction practices and safety considerations will be a major focus of the class. Students will choose and erect equipment using basic configurations suitable for jobsites where this type of scaffold is most frequently utilized.

AP C 753   Intermediate Frame Scaffold   (1.5)
1 hour lecture - 1½ hours laboratory
Introduction of obstacle and height problem solving into frame scaffold project, to include equipment or overhead restrictions. Students will identify and erect equipment using custom configurations for jobsites.

AP C 754   Advanced Frame Scaffold   (1.5)
1 hour lecture - 1½ hours laboratory
Covers the advanced techniques and procedures associated with ground supported frame scaffold, in particular the use of scaffold components for construction of various heavy-duty (industrial) elevated platforms. Safety precautions, building procedures and material utilization will be incorporated into the assigned tasks. Students will erect heavy-duty large scale platform scaffolds using project plans and designs for this industrial scaffold application.

AP C 755   Basic Tube and Clamp Scaffold   (1.5)
1 hour lecture - 1½ hours laboratory
Covers the basic techniques and procedures associated with tube and clamp scaffold components and erection methods. Construction practices and safety considerations will be a major focus of the class. Students will learn to choose and erect equipment using custom configurations for jobsites.

AP C 756   Scaffold in Confined Spaces   (1.5)
1 hour lecture - 1½ hours laboratory
Instruction in safe access, entry and monitoring methods for confined space. Both CAL-OSHA and Federal OSHA regulation are covered in detail. The importance of a respirator fit test and respiratory protection training are covered in this course.

AP C 757   Specialty Scaffold Applications   (1.5)
1 hour lecture - 1½ hours laboratory
Includes specialty scaffold applications focusing on ramps, chutes and mobile towers suitable for light and heavy duty use. Students will learn the characteristics of commercial and industrial scaffold construction. Selected projects will introduce the techniques and procedures used for access/egress, debris handling, and maintenance scaffolds.

AP C 758   Scaffold Reshoring   (1.5)
1 hour lecture - 1½ hours laboratory
Present students with the modified principles and techniques for the use of shoring equipment in a re-shore application. The importance of uniform loading and alignment of muti-tower/tandem tower configurations will be covered. Students will identify and erect scaffold equipment using three types of configurations suitable for scaffold re-shoring purposes.

AP C 761   Basic Wall Framing   (1.5)
1 hour lecture - 1½ hours laboratory
Presents the theory, methods, and procedures required to frame basic walls. Hands-on practice using proper tool techniques and appropriate materials will enhance fundamental skill development. Beginning with an introduction to print reading, students will perform: basic wall layout; plating procedures; framing assembly and bracing; before aligning and completing selected wall construction project to industry standards.

AP C 764   Abutments   (1.5)
1 hour lecture - 1½ hours laboratory
Provides instruction in the detailing, layout and construction of abutments used in the heavy highway industry. The terms, components, materials, building techniques and procedures will be presented. The class project includes keyway, panel, head wall and wing wall construction

AP C 765   Rigging   (1.5)
1 hours lecture - 1½ hours laboratory
Prerequisite: *Student is a Registered State Indentured Apprentice*
Lifting theory and practical rigging methods and procedures to include rigging attachment procedures, lifting equipment, limits of operation, and communication practices.

AP C 770   Green Building and Weatherization   (1.5)
1 hour lecture - 1½ hours laboratory
Energy efficiency, "green" building methods, rating systems and commissioning will be discussed. Products, techniques, and weatherizing procedures used for new buildings and retro-fit buildings will be included in hands-on activities. Practices and devises used to maintain healthy air quality during construction will be a focus of the training.

AP C 771   Intermediate Commercial Framing   (1.5)
1 hour lecture - 1½ hours laboratory
Enhances basic wall framing theory, and wall construction techniques are applied at increased skill levels. A review of basic wall framing and floor plans used for job planning, design recognition, and materials lists is included. Students will layout and detail wall plates for locating basic wall components and door openings. Instruction includes measuring skills, mathematical principles, wall assembly and installation procedures, and detail how structural connections are made.

AP C 772   Solar Installer Level 1   (1.5)
1 hour lecture - 1½ hours laboratory
Covers the design and function of several types of solar installation. The methods, sequences and procedures for foundation layout, elevation, and assembly for solar construction will be presented. Jobsite safety, print interpretation, material identification, and use of system devices and testing criteria will be stressed. Students will construct three selected solar installation projects.

AP C 773   Water Treatment Facilities   (1.5)
1 hour lecture - 1½ hours laboratory
Instruction in the detailing, layout, and construction of concrete formwork and waterstop used in water treatment facilities. The terms, components, materials, building techniques and procedures will be presented. The class project includes keyway, panel, waterstop, head wall and wing wall construction.

AP C 774   Tool & Equipment Applications   (1.5)
1 hours lecture - 1½ hours laboratory
Prerequisite: *Student is a Registered State Indentured Apprentice*
This course promotes hand/power tool and equipment skill development for various construction applications. Scaffold building, aerial lift safety, and operating procedures will be covered. Upon successful completion, students will be issued United Brotherhood of Carpenters (UBC) Aerial Lift and Scaffold Erector-Welded Frame Qualification Cards.

AP C 775   Store Front Installations   (1.5)
1 hours lecture - 1½ hours laboratory
Prerequisite: *Student is a Registered State Indentured Apprentice*
Installation process from constructing storefront openings to putting glass components into commercial store front metal framing.

AP C 776   Total Station 1   (1.5)
1 hours lecture - 1½ hours laboratory
Prerequisite: *Student is a Registered State Indentured Apprentice*
Evolution of survey and layout instrument and the advantages of using a total station for building layout over traditional methods. Students will set up a total station and configure the software.

AP C 777   Welding Fabrication   (1.5)
1 hours lecture - 1½ hours laboratory
Prerequisite: *Student is a Registered State Indentured Apprentice*
Introduction to layout, and basic welding and fabrication. Students will be introduced to the basic skills of measuring, equipment set-up and cutting, shaping, grinding, welding, filing, heating and bending of metal parts.

AP C 778   Solid & Stone Surfaces   (1.5)
1 hours lecture - 1½ hours laboratory
Prerequisite: *Student is a Registered State Indentured Apprentice*
Basic and advanced assembly and installation techniques for solid surface, natural stone and manufactured materials. Students will use the procedures presented to fabricate countertops and create a design inlay.

AP C 779   Exit & Electrical Security Devices   (1.5)
1 hours lecture - 1½ hours laboratory
Prerequisite: *Student is a Registered State Indentured Apprentice*
Classification, types, models, codes, and uses for accident hazard exit ("panic") devices.

AP C 780   Fitting Rooms/Partitions   (1.5)
1 hours lecture - 1½ hours laboratory
Prerequisite: *Student is a Registered State Indentured Apprentice*
This course will compare styles, attachment methods and installation techniques for various fitting room and partition fixtures.

AP C 781   Industrial Scaffolding   (1.5)
1 hours lecture - 1½ hours laboratory
Prerequisite: *Student is a Registered State Indentured Apprentice*
Basic Techniques and procedures associated with frame, system, and tube and clamp scaffold components used in industrial settings. Construction practices and safety considerations will be a major focus of the class including general plant operating conditions and hazards.

AP C 782   Bridge Falsework   (1.5)
1 hours lecture - 1½ hours laboratory
Prerequisite: *Student is a Registered State Indentured Apprentice*
Bridge falsework design and construction methods and procedures. Students will construct bridge falsework using job-built methods.

AP C 783   Crew Lead Training   (1.5)
1 hours lecture - 1½ hours laboratory
Prerequisite: *Student is a Registered State Indentured Apprentice*
This course covers the supervisory and crew leadership skills required for professional development in the residential/commercial scaffold/plaster erector industry.

AP C 797   Carpentry Topics   (.5 - 4)
Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture and/or laboratory may be scheduled by the department. Refer to Class Schedule.
Topics in Carpentry. See Class Schedule for specific topic offered. Course title will designate subject 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.

COURSE OFFERINGS

AP DL 701   Orientation   (1.5)
1 hour lecture - 1½ hours laboratory
Note: *Cross listed as AP PL 701/ AP AC 701*
An introduction to the Interior Systems program. Safe and proper use of hand tools, power tools, trade related math, beginning print reading and layout as well as safety certifications. Certifications will include scaffold erector/dismantler (welded frame) and low velocity powder actuated tools.

AP DL 702   Safety and Health Certifications   (1.5)
1 hour lecture - 1½ hours laboratory
Note: *Cross listed as AP PL 702/AP AC 702/AP DL 702/AP PL 702*
Instruction in safety and health training that meets the needs of the Interior Systems industry. Content includes certification in Power Industrial Trucks, Aerial Lift, American Red Cross First Aid / CPR/ AED, and OSHA 10.

AP DL 703   Printreading   **(1.5)**
1 hour lecture - 1½ hours laboratory
Note: *Cross listed as AP PL 703/ AP AC 703*
An introduction to the basic visualization skills needed for reading and interpreting construction prints. Demonstration of the significance of views, elevations and the role of specifications as they relate to prints.

AP DL 704   Advanced Printreading   **(1.5)**
1 hour lecture - 1½ hours laboratory
Note: *Cross listed as AP AC 704*
In-depth training for on-the-job print reading situations. Covers advanced layout tasks and solutions to typical construction problems using plans and specifications for commercial construction projects.

AP DL 705   Basic Lathing   **(1.5)**
1 hour lecture - 1½ hours laboratory
Note: *Cross listed as AP PL 705*
Presents the basic lathing methods used in the industry for exterior/interior installations. Students will use the skills presented to complete a lathing project as part of this course.

AP DL 706   Framing Ceilings and Soffits   **(1.5)**
1 hour lecture - 1½ hours laboratory
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 707   Basic Metal Framing   **(1.5)**
1 hour lecture - 1½ hours laboratory
Prerequisite: *Student is a Registered State Indentured Apprentice*
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 708   Framing Suspended Ceilings   **(1.5)**
1 hour lecture - 1½ hours laboratory
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 709   Framing Curves and Arches   **(1.5)**
1 hour lecture - 1½ hours laboratory
Prerequisite: *Student is a Registered State Indentured Apprentice*
Provides instruction in framing methods for curves and arches and their related structural limitations. Students will use the skills presented to complete a framing project that includes curves and arches as part of this course.

AP DL 710   Light Gage Welding - AWS - A   **(1.5)**
1 hour lecture - 1½ hours laboratory
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 711   Light Gage - L.A. City Certification   **(1.5)**
1 hour lecture - 1½ hours laboratory
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 712   Basic Hand Finishing   **(1.5)**
1 hour lecture - 1½ hours laboratory
Develop basic hand finishing skills using the correct tools and materials. Includes a description of finishing levels, hand tool manipulation, material identification, selection, and mixture preparation. Key processes and application techniques will be presented. Students will review plans and specifications, calculate and select materials, and complete a wall project to a level four finish.

AP DL 713   Drywall Acoustical Ceilings   **(1.5)**
1 hour lecture - 1½ hours laboratory
Identifies the materials and methods used for the installation of acoustical ceilings. Seismic codes, materials, and requirements are also reviewed. Installation for various grid systems will be discussed. Students will use the skills presented to complete an acoustical ceiling project as part of this course.

AP DL 714   Door/Door Frames   **(1.5)**
1 hour lecture - 1½ hours laboratory
Introduction to the basic installation of door frames and various types of doors. Lock sets, closures, hinges, panic hardware, and door sweeps will be discussed and demonstrated.

AP DL 715   Exterior Insulation Finish Systems (EIFS)   **(1.5)**
1 hour lecture - 1½ hours laboratory
Note: *Cross listed as AP PL 715*
Introduction to the basic working knowledge and technical skills needed to successfully install Exterior Insulation and Finish Systems EIFS (foam products) to meet industry specifications and standards. Introduction to the proper usage of products and materials will be discussed and used.

AP DL 716   Firestop/Fireproofing Procedures   **(1.5)**
1 hour lecture - 1½ hours laboratory
Note: *Cross listed as AP PL 716*
Emphasis on the correct methods, technical skills and firestop materials required to complete a Firestop System. Firestopping is a complete fire containment system designed to prevent the passage of fire, smoke and hot gasses from one side of a rated wall/ceiling assembly to another.

AP DL 717   Free-Form Lathing   **(1.5)**
1 hour lecture - 1½ hours laboratory
Introduction to the techniques and skills needed for construction of freeform lath projects. Layout techniques using grids and projection overlay will be presented. Methods for bending and shaping of rebar and pencil rod, lath handling and tying along with welding and cutting techniques will be demonstrated and applied.

AP DL 718   Automatic Finishing Tools   **(1.5)**
1 hour lecture - 1½ hours laboratory
Advanced instruction in blueprints, finish schedules, and machine parts identification, as well as proper use, assembly and breakdown of tools.

AP DL 720   Drywall Installation/Finish Trims   **(1.5)**
1 hour lecture - 1½ hours laboratory
Instruction in the basics of gypsum board application and finish trims.

AP DL 721   Advanced Hand Finishing   **(1.5)**
1 hour lecture -1½ hours laboratory
In depth instruction in hand tool use. The different operations, phases, and materials to be used in order to have information of what a finished product should look like.

AP DL 722   Advanced Automatic Finishing Tools   **(1.5)**
1 hour lecture - 1½ hours laboratory
Instruction in the proper methods and sequences of the "bazooka," flat boxes, nail spotters and angle boxes.

AP DL 723   Advanced Lathing   **(1.5)**
1 hours lecture - 1½ hours laboratory
Prerequisite: *Student is a Registered State Indentured Apprentice*
This course will distinguish advance lathing methods and styles from basic application techniques for lath and trim products used on exterior-interior metal framing. Metal framing elements, various bead styles, lathing types and substrates will be covered in both discussions and lab activities. Proper leveling and finishing methods will be demonstrated. Students will apply lath and trim using the techniques presented to complete course projects.

AP DL 724   Ceiling and Soffit Finishing   (1.5)
1 hour lecture - 1½ hours laboratory
Designed to provide an advanced level of finishing skill for applications with architecturally detailed ceilings and soffits. Guided practice with a combination of hand and automatic tool techniques will promote the level of manipulative ability required for a successful result. A variety of finish trims will be integrated into each method of finish. Training will conclude with inspection criteria for evaluating finish levels.

AP DL 726   Reinforced Substrate Installations   (1.5)
1 hours lecture - 1½ hours laboratory
Prerequisite: Student is a Registered State Indentured Apprentice
Presents the applications, techniques, and product considerations typical of reinforced substrate installations. The training will focus on Glass Fiber Reinforced Gypsum and Glass Fiber Reinforced Concrete (GFRG) & (GFRC) products. The lab project will include layout, cutting and handling practices, attachment methods, alignment and various related installation methods.

AP DL 728   Drywall Applications   (1.5)
1 hours lecture - 1½ hours laboratory
Prerequisite: Student is a Registered State Indentured Apprentice
Focus on the skills to properly handle and install drywall used in specialized applications including fire resistance, sound control, and life safety. Layout, cutting, attachment procedures and productivity techniques will be discussed and practiced under jobsite conditions. Drywall finishing methods will be incorporated into the hands-on activity.

AP DL 729   Advanced Metal Framing   (1.5)
1 hour lecture - 1½ hours laboratory
Review of basic metal framing and detailed procedures for framing curved, serpentine, and elliptical non load bearing partitions.

AP DL 730   Air, Moisture & Thermal Barriers   (1.5)
1 hours lecture - 1½ hours laboratory
Prerequisite: Student is a Registered State Indentured Apprentice
Building sealing products and installation techniques.

AP DL 731   Drywall Repair and Finishing   (1.5)
1 hours lecture - 1½ hours laboratory
Prerequisite: Student is a Registered State Indentured Apprentice
Various types of wall patching and finish repairs.

AP DL 732   Light Gage Welding AWS (B)   (1.5)
1 hours lecture - 1½ hours laboratory
Prerequisite: Student is a Registered State Indentured Apprentice
Light gage welding methods and techniques aligned with American Welding Society (AWS) welding processes, symbols, materials, and safety procedures.

AP DL 797   Drywall/Lather Topics   (.5 - 4)
Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture and/or laboratory may be scheduled by the department. Refer to Class Schedule.
Topics in Drywall/Lather. See Class Schedule for specific topic offered. Course title will designate subject covered.

Electrician (AP E)

A five-year apprenticeship program. Applications for Riverside/San Bernardino/Mono/Inyo counties should apply to the Riverside and San Bernardino Joint Electrical Apprenticeship Training. Committees, 1855 Business Center Drive, San Bernardino, CA 92408. Telephone: (909) 890-1703.

COURSE OFFERINGS

**AP E 701   Introduction to the Electrical Trade
and Industry, DC Theory and Conduit Bending   (4)**
3 hours lecture - 3 hours laboratory
Orientation to the electrical industry; introduction to the electrical code fundamentals of wiring methods, fastening devices, electrical conductors, circuits, and voltage.

**AP E 702   Electrical Theory, Practice and
Blueprint Reading   (4)**
3 hours lecture - 3 hours laboratory
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 703   Inductance and Capacitance Theory
and Codeology   (4)**
3 hours lecture - 3 hours laboratory
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 704   Transformers and Code Calculations, Conduit
Bending and Blueprints   (4)**
3 hours lecture - 3 hours laboratory
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 705   Introduction to Electronics and
Industrial Blueprints   (4)**
3 hours lecture - 3 hours laboratory
Introduction to basic electronics including examination of semiconductor devices, current and voltage manipulation, applications, and blueprint reading.

**AP E 706   Grounding, Electrical Services, and Transform
Three-Phase Connections   (4)**
3 hours lecture - 3 hours laboratory
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 707   Electrical Motor Control, Pilot Devices,
Starters and Relays   (4)**
3 hours lecture - 3 hours laboratory
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 708   Digital Electronics   (4)
3 hours lecture - 3 hours laboratory
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 709   Management, Fire Alarms, High Voltage Testing,
and Telephone and Security Wiring   (4)**
3 hours lecture - 3 hours laboratory
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 710   Programmable Logic Controllers   (4)
3 hours lecture - 3 hours laboratory
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 Intelligent Transport (AP IT)

COURSE OFFERINGS

**AP IT 701   Introduction to the Intelligent
                Transportation Systems Trade and Industry   (4)**
3 hours lecture - 3 hours laboratory
Prerequisite: *Student is a Registered State Indentured Apprentice*
Orientation to the intelligent transportation systems industry with emphasis
on an introduction to apprenticeship, jobsite overview, tools, hardware,
beginning conduit bending and electrical system principles. Particular attention
will be given to fundamental mathematics, safety awareness, and apprentice
responsibilities.

AP IT 702   Electrical Theory, Applications and Blueprint Reading (4)
3 hours lecture - 3 hours laboratory
Prerequisite: *Student is a Registered State Indentured Apprentice*
Introduction to Ohms law and electrical DC theory. Study of proper load
rigging and hoisting techniques. Knot tying and rope usage. Underground
electrical applications. Conduit trenching installations. Basic blueprint reading
and surveying for electrical construction projects.

**AP IT 703   DC circuits, Codeology, and
                Underground Installations   (4)**
3 hours lecture - 3 hours laboratory
Prerequisite: *Student is a Registered State Indentured Apprentice*
Study of circuit analysis techniques, DC circuit theory, National Electric Code
(NEC), underground installations, grounding systems.

**AP IT 704   AC Theory, Blueprints Maintenance and
                Trouble shooting   (4)**
3 hours lecture - 3 hours laboratory
Prerequisite: *Student is a Registered State Indentured Apprentice*
Study of blue print fundamentals. Students participate in exercises involving,
symbols, conversions and abbreviations. Students draw electrical diagrams of
DC circuits. Introduction into AC theory. Maintenance and troubling shooting
of electrical circuits. Traffic signal cabinets and equipment is covered.

**AP IT 705   Combination Circuits, Traffic Signal Cabinets
                and Controllers   (4)**
3 hours lecture - 3 hours laboratory
Prerequisite: *Student is a Registered State Indentured Apprentice*
Introduction to electrical power quality, power factors, combination circuits,
traffic signal cabinets, traffic signal controllers, traffic signal coordination, bridge
blueprints, sign structures, street lighting, and leadership skills.

AP IT 706   Alternative Energy Systems, CCTV , Fiber Optics   (4)
3 hours lecture - 3 hours laboratory
Prerequisite: *Student is a Registered State Indentured Apprentice*
Introduction to alternative energy systems, photovoltaics, uninterrupted power
supply, CATV and CCTV Systems, security systems, fiber optics, video motion
detectors, video communications control, traffic signal timing, troubleshooting
and leadership skills.

AP IT 707   Motor Control, Safety Training and Certifications (4)
3 hours lecture - 3 hours laboratory
Prerequisite: Prerequisite: Student is a Registered State Indentured Apprentice
Study of motor controls and circuits, pilot devices, starters, and relays. Includes
the analysis and development of circuits, the installation and the service of
electrical equipment. OSHA 30/EM 385 certification and IMSA Certifications.

AP IT 708   Electrical Certification and Project Supervision   (4)
3 hours lecture - 3 hours laboratory
Prerequisite: *Student is a Registered State Indentured Apprentice*
Designed to prepare the student to take the California General Electrical State
Certification Examination. Provides a review of concepts and principles, but
focuses primarily on understanding and applying the National Electric Code
(NEC).

Inside Wireman (AP IW)

A five-year apprenticeship program. Study of technical course development
and delivery techniques for the electrical trade, utilizing classroom-
proven techniques. The student will familiarize him/herself with classroom
management, testing and assessment techniques, curriculum development and
material presentation based on industry-standard and college level instructional
methodologies. Applications for this program should be directed to the San
Diego Electrical Training Trust, 4675 Viewridge Avenue, San Diego, CA 92123.
Telephone (858) 569-6633, ext. 111.

COURSE OFFERINGS

AP IW 701   Introduction to the Electrical Trade   (4)
3 hours lecture - 3 hours laboratory
Introduction to the electrical industry, with emphasis on jobsite safety, basic
conduit bending, National Electric Code (NEC), sexual harassment, introduction
to blueprints, tools and their use. Particular attention will be given to fastening
devices, basic mathematics, resistance, voltage, power in DC series, parallel, and
combination circuits.

AP IW 702   Electrical Theory, Practice and Blueprint Reading   (4)
3 hours lecture - 3 hours laboratory
Survey of drug awareness, Union Constitution and Bylaws, parliamentary
procedure, test instruments, 3Ø electrical systems, DC and AC power
generation, specialized conduit bending techniques, National Electric Code
(NEC), solid state devices, blueprint analysis, AC theory, transformers, vector
analysis, impedance, voltage, power in AC series, parallel, and combination
circuits.

AP IW 703   Inductance and Capacitance Theory   (4)
3 hours lecture - 3 hours laboratory
Study of circuit analysis techniques, power factor, semiconductors, AC system
grounding and bonding, ground fault protection systems, overcurrent protective
devices (fuse and circuit breakers), test instruments, National Electric Code
(NEC), and industrial blueprint analysis.

AP IW 704   Transformer, Motors, and Motor Controls   (4)
3 hours lecture - 3 hours laboratory
Study of real-world application of transformer, motor and motor control
concepts utilizing extensive hands-on labs and demonstrations. Students work
in foremen-led teams to design, build, and test motor control circuits. Students
will gain familiarity with a wide array of test instruments including DMMs,
voltage testers, megohmmeters, clamp-on ammeters, capacitance testers and
other equipment.

AP IW 705   Special Electrical Systems   (4)
3 hours lecture - 3 hours laboratory
Introduction to telephony and data networks, fire alarm systems, nurse call
systems, Programmable Logic Controllers (PLCs), arc-flash protection, and
instrumentation concepts, National Electric Code (NEC), and OSHA rules and
regulations.

AP IW 706   Specialized Electrical Applications   (4)
3 hours lecture - 3 hours laboratory
Introduction to electrical power quality, CATV and CCTV Systems, security
systems, fiber optics, hazardous locations, lighting protection, advanced conduit
bending, HVAC principles and controls, blueprints, and leadership skills.

AP IW 713   Electrical Project Supervision   (4)
3 hours lecture - 3 hours laboratory
An overview of all processes required to run a successful job. The class utilizes
field trips and speakers to give the student a 360° view of the workplace. Each
speaker will bring expertise from the field into the classroom where students
will learn the right and the wrong way to organize and run a jobsite.

AP IW 714   Electrical Certification Preparation   (4)
3 hours lecture - 3 hours laboratory
Designed to prepare the student to take the California Electrician Certification Examination (CECE). Provides a review of concepts and principles, but focuses primarily on understanding and applying the national Electric Code (NEC), the set of standards upon which the CECE is based.

AP IW 716   Photovoltaics   (4)
3 hours lecture - 3 hours laboratory
Technologies and installation requirements for photovoltaic systems. Subjects presented in this course are renewable energy construction, renewable energy resources, renewable energy efficiency, and energy savings devices used in construction.

AP IW 725   Building Automation Systems   (4)
3 hours lecture - 3 hours laboratory
Technologies and installation requirements for Building Automation Systems (BAS.) The subjects presented in this course are Building Automation applications and requirements used in the construction of commercial and industrial buildings. This course allows students to practice the technical skills required to successfully install, commission, and verify operation of a wide variety of advanced components, such as photosensors, occupancy sensors, digital dimming networked and wireless control systems, programmable time clocks, and emergency lighting controls. In addition, it comprehensively addresses the requirements, regulations, products and strategies which will enable electricians to master successful, expert, and professional customer relations, installation, and maintenance of Electric Vehicle (EV) and Plug-in Hybrid Electric Vehicle (PHEV) infrastructure.

AP IW 726   Electrical Construction Practices   (4)
3 hours lecture - 3 hours laboratory
The technologies and skill sets required for installing and provisioning the electrical requirements for commercial or industrial facilities. The topics presented in this course include electrical distribution overview, safety, OSHA requirements, shoring, trenching, Sempra Service Guide requirements, rigging, IEEE Standards, Blueprints, CSI Master Format construction specifications and National Electrical requirements for electrical services and distribution systems.

AP IW 797   Inside Wireman Topics   (2 - 4)
Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture and/or laboratory may be scheduled by the department. Refer to Class Schedule.
Topics in Inside Wireman. See Class Schedule for the specific topic offered. Course title will designate subject covered.

Plasterer (AP PL)

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.

COURSE OFFERINGS

AP PL 701   Orientation   (1.5)
1 hour lecture - 1½ hours laboratory
Prerequisite: Indentured apprentice to a designated Joint Apprenticeship and Training Committee
Note: Cross listed as AP DL 701/ AP AC 701
An introduction to the Interior Systems program. Safe and proper use of hand tools, power tools, trade related math, beginning print reading and layout as well as safety certifications. Certifications will include scaffold erector/dismantler (welded frame) and low velocity powder actuated tools.

AP PL 702   Safety and Health Certifications   (1.5)
1 hour lecture - 1½ hours laboratory
Note: Cross listed as AP AC 702/AP C 702/AP DL 702/AP PL 702
Instruction in safety and health training that meets the needs of the Interior Systems industry. Content includes certification in Power Industrial Trucks, Aerial Lift, American Red Cross First Aid / CPR/ AED, and OSHA 10.

AP PL 703   Printreading   (1.5)
1 hour lecture - 1½ hours laboratory
Note: Cross listed as AP DL 703/ AP AC 703
An introduction to the basic visualization skills needed for reading and interpreting construction prints. Demonstration of the significance of views, elevations and the role of specifications as they relate to prints.

AP PL 705   Basic Lathing   (1.5)
1 hour lecture - 1½ hours laboratory
Note: Cross listed as AP DL 705
Presents the basic lathing methods used in the industry for exterior/interior installations. Students will use the skills presented to complete a lathing project as part of this course.

AP PL 706   Basic Plastering   (1.5)
1 hour lecture - 1½ hours laboratory
This course provides a brief history of plastering and a complete picture of what the plastering industry is like today. The importance of good lathing and proper inspection of lathing will be emphasized. Proper hawk and trowel and basic tool use will be demonstrated.

AP PL 707   Exterior Plastering   (1.5)
1 hour lecture - 1½ hours laboratory
An introduction to Portland Cement Plaster (a.k.a. stucco) and the processes involved in completing a plastering job. This course will stress the importance of good workmanship and adherence to proven methods of work. Students will begin to develop mastery of basic plastering tools in this course.

AP PL 708   DOT and Screed Techniques   (1.5)
1 hour lecture - 1½ hours laboratory
This course is designed to teach the importance of plumb and square projects. The students will use 3-4-5 or center line methods to square the project, establish control lines and wall finish lines. The plumbing of the project will be demonstrated through the dotting and screeding portion of instruction. The student will brown up and finish a project using methods of application previously covered.

AP PL 709   Interior Plastering   (1.5)
1 hour lecture - 1½ hours laboratory
An introduction to modern gypsum interior plastering systems. Proper methods of application, proper proportioning and mixing, and good workmanship will be demonstrated in this course.

AP PL 710   Finish Applications   (1.5)
1 hour lecture - 1½ hours laboratory
The course will emphasize three different types of molds, their use and application. Components and production of a mold, how to horse a mold and create inside and outside miters will also be covered.

AP PL 711   Ornamental Plastering   (1.5)
1 hour lecture - 1½ hours laboratory
This course is designed to provide instruction and practice in advanced geometric lay out problems. Class project will guide students through each phase of production to produce an elliptical arch, with keystone at the arch apex. The project will introduce students to benching a mold, setting and pointing staff, building a working trammel and successfully running a trammel mold.

AP PL 713   Theme Plastering   (1.5)
1 hours lecture - 1½ hours laboratory
Prerequisite: Student is a Registered State Indentured Apprentice
This course is designed to teach the student the basic knowledge and skills required to successfully plan and execute a simple project that requires the use of manufactured rock. A study of real rock formations and the techniques used to copy them will be covered as well as painting and highlighting, required tools, art lay out, and carving techniques.

AP PL 715   Exterior Insulation Finish Systems (EIFS)   (1.5)
1 hour lecture - 1½ hours laboratory
Note: *Cross listed as AP DL 715*
Introduction to the basic working knowledge and technical skills needed to successfully install Exterior Insulation and Finish Systems EIFS (foam products) to meet industry specifications and standards. Introduction to the proper usage of products and materials will be discussed and used.

AP PL 716   Firestop/Fireproofing Procedures   (1.5)
1 hour lecture - 1½ hours laboratory
Note: *Cross listed as AP DL 716*
Emphasis on the correct methods, technical skills and firestop materials required to complete a Firestop System. Firestopping is a complete fire containment system designed to prevent the passage of fire, smoke and hot gasses from one side of a rated wall/ceiling assembly to another.

AP PL 717 Plastering Equipment Application   (1.5)
1 hour lecture - 1½ hours laboratory
Instruction in the materials, application methods and techniques for operating a plaster pump. Students will complete a three-coat work application to industry standards. Emphasis on proper pump set-up, washout and maintenance.

AP PL 718 Plastering Equipment   (1.5)
1 hour lecture - 1½ hours laboratory
Terminology, components and operating procedures for plastering equipment and machinery. Machine maintenance, safety, troubleshooting procedures, limits of operation and communication practices will be covered. Students will inspect and properly set up and clean a plastering pump.

AP PL 797   Plasterer Topics   (.5–4)
Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture and/or laboratory may be scheduled by the department. Refer to Class Schedule.
Topics in Plasterer. See Class Schedule for specific topic offered. 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 (619) 265-2758.

COURSE OFFERINGS

AP SM 701   Core I   (4)
3 hours lecture - 3 hours laboratory
An introduction to the basic principles, processes, drawings, materials and practices used in the sheet metal industry.

AP SM 702   Core II   (4)
3 hours lecture - 3 hours laboratory
A continuation of basic sheet metal processes as well as an introduction to simple sheet metal forming processes.

AP SM 703   Core III   (4)
3 hours lecture - 3 hours laboratory
An introduction to intermediate sheet metal processes demonstrating job layout, architectural details and construction techniques with problems of unusual complexity and difficulty.

AP SM 704   Core IV   (4)
3 hours lecture - 3 hours laboratory
A continuation of intermediate processes with problems of unusual difficulty and complexity.

AP SM 705   Sheet Metal Welding   (3)
1½ hours lecture - 4½ hours laboratory
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 706   Plans and Specifications   (4)
3 hours lecture - 3 hours laboratory
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 709   Foreman and Project Management Training   (4)
3 hours lecture - 3 hours laboratory
Overview of the knowledge, skills and abilities required to effectively perform as a foreman and project manager in the sheet metal industry.

AP SM 710   Architectural Application   (4)
3 hours lecture - 3 hours laboratory
Overview of the knowledge, skills, and abilities of advanced architectural project performance.

AP SM 711   HVAC I   (4)
3 hours lecture - 3 hours laboratory
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 712   HVAC II   (4)
3 hours lecture - 3 hours laboratory
Designed to build on the principles of basic HVAC system design and installation. Students will develop a better understanding of how a modern HVAC system is designed and functions. Field installation, plans and specifications, commissioning, project management and basic LEED principles will also be 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, 1855 Business Center Drive, San Bernardino, CA 92408. Telephone: (909) 890-1703.

COURSE OFFERINGS

AP SC 701   Introduction to the Sound and Communication Trade Industry   (4)
3 hours lecture - 3 hours laboratory
Introduction to the sound and communication industry, electrical code, fundamentals of wiring methods, fastening devices, electrical conductors, circuits, voltage and data communication.

AP SC 702   Electrical Theory and Practices DC   (4)
3 hours lecture - 3 hours laboratory
Prerequisite: *A minimum grade of 'C' in AP SC 701*
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 703   Electrical Theory and Practices AC   (4)
3 hours lecture - 3 hours laboratory
Prerequisite: *A minimum grade of 'C' in AP SC 702*
Study of apprenticeship, electrical inductance, capacitance and reactance, including grounded conductors, branch circuits, transformer principles, RCL circuits and filters.

AP SC 704   Semiconductor Electronics   (4)
3 hours lecture - 3 hours laboratory
Study of solid-state electronic theory and components, diodes, transistors, SCR, triacs, diacs, IC amplifiers and op-amps.

AP SC 705   Introduction to Digital Electronics and Signaling Devices   **(4)**
3 hours lecture - 3 hours laboratory
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 706   Management/Alarms/Codes/Circuits   (4)
3 hours lecture - 3 hours laboratory
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 707   Life Safety and Security System Applications   (4)
3 hours lecture - 3 hours laboratory
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) installations.

AP SC 708   Specialized Systems and Supervision Techniques   (4)
3 hours lecture - 3 hours laboratory
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.

Work Experience (AP WE)

Students may earn a maximum of 16 units in AP Work Experience.

COURSE OFFERINGS

AP WE 710   Sheet Metal Work Experience   (4)
12 hours laboratory
Note: Pass/No Pass grading only
Supervised on-the-job training in the Sheet Metal Trade.

AP WE 711   Carpentry Work Experience   (4)
12 hours laboratory
Note: Pass/No Pass grading only
Supervised on-the-job training in the Carpentry trade.

AP WE 712   Drywall/Acoustical Work Experience   (4)
12 hours laboratory
Note: Pass/No Pass grading only
Supervised on-the-job training in the Interior Systems Trade.

AP WE 713   Electrician Work Experience   (4)
12 hours laboratory
Note: Pass/No Pass grading only
Supervised on-the-job training in the Electrician trade.

Arabic (ARAB)

Contact the World Languages Department for further information.
760-744-1150, ext. 2390
Office: H-201

COURSE OFFERINGS

ARAB 101   Arabic I   (5)
5 hours lecture - 1 hour laboratory
Note: Not open to students with credit for ARAB 101B.
Transfer acceptability: CSU; UC
This course is the first semester of 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. Course combines in-class instruction and practice with self-paced study in the World Languages Laboratory. This beginning-level course is for students with no previous coursework in Arabic.

ARAB 102   Arabic II   (5)
5 hours lecture - 1 hour laboratory
Prerequisite: A minimum grade of 'C' in ARAB 101or two years of high school Arabic
Transfer acceptability: CSU; UC
Note: Not open to students with credit for ARAB 102B
This course is the second semester of Arabic. This elementary level course is a study of the Arabic language and Arabic-speaking cultures, with continued emphasis on the development of communicative skills and basic structures. Course combines in-class instruction and practice with self-paced study in the World Languages Laboratory.

ARAB 201   Arabic III   (5)
5 hours lecture - 1 hour laboratory
Prerequisite: A minimum grade of 'C' in ARAB 102 or three years of high school Arabic
Transfer acceptability: CSU; UC
Note: Not open to students with credit for ARAB 201B
This course is the third semester of 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. Course combines in-class instruction with self-paced study in the World Languages Laboratory. Class is largely conducted in Arabic.

Architecture (ARCH)

Contact the Design and Manufacturing Technologies Department for further information.
760-744-1150, ext. 2349
Office: DR-5
Associate Degree, Certificate of Achievement and Certificate of Proficiency requirements are listed in Section 6 (green pages).

COURSE OFFERINGS

ARCH 105   Basic Architectural Drafting   (3)
1½ hours lecture - 4½ hours laboratory
Transfer acceptability: CSU
An introduction to architectural hand drafting and sketching including graphic delineation, lettering, construction theory, construction details, and building codes as related to the development of working drawings for residential design.

ARCH 120   Architectural History   (3)
3 hours lecture
Transfer acceptability: CSU; UC
An overview of the architectural history of Egyptian, Mesopotamia, Aegean and Greek, Roman and Byzantine, Romanesque and Gothic, and the Renaissance and Baroque periods. Pictorial representation and visual studies of these structures will be taught through sketching and student presentation.

ARCH 121   Multicultural Architectural History   (3)
3 hours lecture
Transfer acceptability: CSU; UC
A comparative study of the architecture of cultures outside the Western main-stream 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. Pictorial representation and visual studies of these structures will be taught through sketching and student presentation.

ARCH 122   History of Architectural Theory   (3)
3 hours lecture
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.

ARCH 135   Architectural Materials and
**   Methods of Construction   (3)**
1½ hour lecture - 4½ hours laboratory
Transfer acceptability: CSU
A hands-on study of the physical samples of building construction, field visits, and permit processing of projects.

ARCH 145   Designing for Communication and Presentation   (3)
1½ hour lecture - 4½ hours laboratory
Recommended preparation: ID/ARCH 150
Note: May not be taken for Pass/No Pass grading
Transfer acceptability: CSU; UC
A drawing, sketching and design exploration of complex architectural modeling including theory, principles and techniques of pictorial drawing, perspective projection, obliques, isometrics, shades, shadows and color. Presentation by hand sketching, AutoCAD, Photoshop and Sketchup tools will be used.

ARCH 150   Beginning Computer Aided Drafting   (3)
1½ hour lecture - 4½ hours laboratory
Note: Cross listed as ID 150
Transfer acceptability: CSU
An introduction to beginning computer aided drafting for architecture and interior design applications using Windows based AutoCAD software and IBM compatible computers. Beginning techniques in the operation of CAD software, design processes and editing techniques, storage and retrieval of drawings, professional presentation and plotting techniques.

ARCH 160   Environmental Architecture and Design   (3)
1½ hour lecture - 4½ hours laboratory
Note: May not be taken for Pass/No Pass grading
Transfer acceptability: CSU; UC
Introduction to the theory and application of bio-climate adaptive architectural design in small scale buildings. Includes effective energy use, solar geometry, environmental measurements, heat flow, heat transfer, and thermal masses. Emphasis on design and construction principles for lighting, passive shading, heating, cooling and ventilating envelope load-dominated buildings.

ARCH 196 Special Problems in Architecture   (1, 2, 3)
3, 6, or 9 hours laboratory
Note: May not be taken for Pass/No Pass grading
Transfer acceptability: CSU; UC - credit determined by UC upon review of course syllabus
Designed to enrich the student's experience within the Architecture program and is of a research or special project nature. Content to be determined by the need of the student under signed contract with the instructor.

ARCH 197   Architecture Topics   (1-4)
½-4 hours lecture - 1½-12 hours laboratory
Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of above lecture and/or laboratory may be scheduled by the department. Refer to Class Schedule.
Transfer acceptability: CSU
Topics in Architecture. See class schedule for specific topic covered. Course title will designate subject.

ARCH 200   Advanced Computer Aided Drafting   (3)
1½ hours lecture - 4.5 hours laboratory
Recommended Preparation: ARCH 150/ID 150
Transfer acceptability: CSU
Advanced techniques in the operation of AutoCAD software for architectural applications. Preparation of various architectural working drawings for a residential design.

ARCH 202   Introduction to Revit Architecture   (3)
1½ hours lecture - 4½ hours laboratory
Transfer acceptability: CSU
Preparation of basic 3D architectural information models and (BIM). Manipulation for preparation of individual architectural working drawings, including: dimensioned floor plans, building sections, elevations, etc. using Revit software.

ARCH 204   Advanced Revit   (3)
1 ½ hours lecture – 4 ½ hours laboratory
Prerequisite: ARCH 202
Transfer acceptability: CSU
Advanced applications of Revit software to build complex "Building Information Models" (BIM), including structural frames and beams, preparation of schedules, architectural and structural details, HVAC component integration and renderings.

ARCH 215   Design Studio IA   (3)
1½ hours lecture - 4½ hours laboratory
Transfer acceptability: CSU; UC
Introduction to Architectural form in two and three dimensional compositions, design concepts, and applications through the study of abstract spatial constructions. Development of soft skills and presentation skills culminating in a juried review.

ARCH 216   Design Studio IB   (3)
1½ hours lecture - 4½ hours laboratory
Transfer acceptability: CSU; UC
Development of spatial compositions in relationship to site and context. Development of soft skills and presentation skills culminating in a juried review.

ARCH 217   Design Studio IIA   (3)
1½ hours lecture - 4½ hours laboratory
Transfer acceptability: CSU
Development of architectural design through program analysis, context and site analysis and properties of materials. Development of soft skills and presentation skills culminating in a juried review.

ARCH 218   Design Studio IIB   (3)
1½ hours lecture - 4½ hours laboratory
Transfer acceptability: CSU
Programming schematic designs and design development of a non-commercial building. Development of soft skills and presentation skills culminating in a juried review.

ARCH 295   Architectural Internship   (3)
10 - 12½ hours laboratory
An architectural internship familiarizes you with the day to day operations of an architectural firm. You'll get an around-the-clock view of the office, with your duties ranging from assisting in aspects of architectural design to making client presentations and working with a construction team. You may also assist with general logistics and research rules pertaining to design and construction.

Art (ART)

Contact the Art Department for further information.
760-744-1150, ext. 2302
Office: D-14
Associate Degree, Certificate of Achievement and Certificate of Proficiency requirements are listed in Section 6 (green pages).

COURSE OFFERINGS

Individual courses are not repeatable. State Regulations (Title 5, Sections 55040-55041) also limit the number of times a student may take courses with related content and similar primary educational activities. Therefore, some combinations of course work in Art have limitations on the number of times a student may enroll. Specific information about enrollment limitations for ART classes is available at https://www2.palomar.edu/pages/schedule/enrollment-restrictions/

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)
1½ hours lecture - 4½ hours laboratory
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 Foundations of Drawing (3)
1½ hours lecture - 4½ hours laboratory
Transfer acceptability: CSU; UC
C-ID ARTS 110
Introduction to principles, elements, and practices of drawing, employing a wide range of subject matter and drawing media. Focus on perceptually based drawing, observational skills, technical abilities, and creative responses to materials and subject matter.

ART 103 Intermediate Drawing (3)
1½ hours lecture - 4½ hours laboratory
Prerequisite: A minimum grade of 'C' in ART 102
Transfer acceptability: CSU; UC
C-ID ARTS 205
Exploration of artistic concepts, styles, and creative expression related to intermediate-level drawing, focusing on complex subject matter and concepts using a variety of drawing mediums, techniques, and methodologies. Builds on fundamental drawing skills to develop personalized approaches to content and materials in exercises covering multiple historical and contemporary approaches to drawing.

ART 104 Design and Composition (3)
1½ hours lecture - 4½ hours laboratory
Transfer acceptability: CSU; UC
C-ID ARTS 100
Introduction to the concepts, applications, and historical references related to two-dimensional art and composition, including the study of the basic principles and elements of line, shape, texture, value, color and spatial illusion. Development of a visual vocabulary for creative expression through lecture presentations, studio projects, problem solving, and written assignments.

ART 105 Three-Dimensional Form and Design (3)
1½ hours lecture - 4½ hours laboratory
Transfer acceptability: CSU; UC
C-ID ARTS 101
Basic instruction in sculptural forms and structures. Charts the development of spacial relations from point to line to plane to volume to complex forms and materials. A variety of media is explored.

ART 106 Life Painting (3)
1½ hours lecture - 4½ hours laboratory
Transfer acceptability: CSU; UC
Examines the use of oil, acrylic or watercolor in modeling the human form. Particular attention will be placed on color mixing, drawing and paint application.

ART 120 Foundations of Life Drawing (3)
1½ hours lecture - 4½ hours laboratory
Transfer acceptability: CSU; UC
C-ID ARTS 200
ntroduction to drawing the human figure from observation using a wide variety of drawing media and techniques. Topics include an introduction to human anatomy and the historical and contemporary roles of figure drawing in the visual arts. Students in this course will learn both descriptive and interpretive approaches to drawing the figure.

ART 121 Intermediate Life Drawing (3)
1½ hours lecture - 4½ hours laboratory
Prerequisite: A minimum grade of 'C' in ART 120
Transfer acceptability: CSU; UC–Credit Limitations - Credit for only one attempt
An advanced investigation of the human figure as the primary subject of composition in historical and contemporary art.
Developed for the advanced painting or illustration majors to aid in the preparation of entry portfolios required for admittance to specialized private four year institutions.

ART 125 Introduction to Portraiture (3)
1½ hours lecture - 4½ hours laboratory
Transfer acceptability: CSU; UC
Introduction to portraiture. Special emphasis is placed on the historical and contemporary role of portraiture in art. Techniques range from traditional approaches to expressive application of drawing and painting media.

ART 135 Ceramics I (3)
1½ hours lecture - 4½ hours laboratory
Transfer acceptability: CSU; UC
An introduction to basic forming techniques in clay and various surface treatments.

ART 136 Ceramics II (3)
1½ hours lecture - 4½ hours laboratory
Prerequisite: A minimum grade of 'C' in ART 135
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)
1½ hours lecture - 4½ hours laboratory
Prerequisite: A minimum grade of 'C' in ART 135
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 (3)
1½ hours lecture - 4½ hours laboratory
Recommended preparation: ART 135, 136, and 250
Transfer acceptability: CSU
A study of ceramic surface treatments and decorative techniques.

ART 140 Foundry Techniques in Sculpture I (3)
1½ hours lecture - 4½ hours laboratory
Prerequisite: A minimum grade of 'C' in ART 105
Transfer acceptability: CSU
Theory and practice in casting skills using foundry techniques.

ART 145   Design in Mixed Media   (3)
1½ hours lecture - 4½ hours laboratory
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 147   Design in Enamels   (3)
1½ hours lecture - 4½ hours laboratory
Recommended preparation: ART 104
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)
1½ hours lecture - 4½ hours laboratory
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)
1½ hours lecture - 4½ hours laboratory
Prerequisite: A minimum grade of 'C' in ART 150
Transfer acceptability: CSU
Exploration of manipulation of metal and surface decoration including stone setting.

ART 155   Stained Glass I   (3)
1½ hours lecture - 4½ hours laboratory
Prerequisite: A minimum grade of 'C' in ART 104
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 156   Glass Casting I   (3)
1½ hours lecture - 4½ hours laboratory
Transfer acceptability: CSU
This is a beginning level glass casting class. The course will address technical approaches and artistic applications of glass using kilnforming processes of casting, fusing, and slumping.

ART 160   Glassblowing/Glassforming I   (3)
1½ hours lecture - 4½ hours laboratory
Transfer acceptability: CSU
An introductory course exploring creative applications and potential of glass as a means for artistic expression. Through hands-on material/process and artistic research students will gain an understanding of glassblowing and glassforming as an artist's medium.

ART 163   Arts of Asia   (3)
3 hours lecture
Transfer acceptability: CSU; UC
A survey of the visual arts from China, Southeast Asia, India, Japan and Korea, from the prehistoric to the present. Students will gain an understanding of the major monuments of Asian art within their historical, social, religious, and political frameworks.

ART 164   Arts of Africa, Oceania and the Americas   (3)
3 hours lecture
Transfer acceptability: CSU; UC
C-ID ARTH 140
A survey of the visual arts from Africa, Oceania and the Americas, from the prehistoric to the present. Students will gain an understanding of the major monuments of African, Oceanic, and South, Central, and North American art within their historical, social, religious, and political frameworks.

ART 165   History of Art I: Survey of Western Art   (3)
3 hours lecture
Transfer acceptability: CSU; UC
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
C-ID ARTH 120
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. Focus on European art, but with discussion of American art and architecture, as well as influences from non-Western art and cultures.

ART 169   Survey of Modern Art   (3)
3 hours lecture
Transfer acceptability: CSU; UC
C-ID ARTH 150
This course provides an overview of art and architecture from the Western modern period of the 19th and 20th centuries.

ART 182   Introduction to Arts Management   (3)
9 hours laboratory
Note: Cross listed as AMS 182/ DNCE 182/ MUS 182/ 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: A minimum grade of 'C' in AMS/ART/DANCE/MUS/TA 182
Note: Cross listed as AMS 183/ DNCE 183/ MUS 183/TA 183
Transfer acceptability: CSU
Practical experience in arts management in the visual and performing arts.

ART 197B   Topics in Art – Painting   (3)
Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture and/or laboratory may be scheduled by the department. Refer to Class Schedule.
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 and/or laboratory may be scheduled by the department. Refer to Class Schedule.
Transfer acceptability: CSU
Short and extended term lecture workshops or laboratory courses in various specialized aspects of glass.

ART 197D   Topics in Art – Ceramics   (1-3)
Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture and/or laboratory may be scheduled by the department. Refer to Class Schedule.
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 and/or laboratory may be scheduled by the department. Refer to Class Schedule.
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)**
Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture and/or laboratory may be scheduled by the department. Refer to Class Schedule.
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)**
Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture and/or laboratory may be scheduled by the department. Refer to Class Schedule.
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)**
Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture and/or laboratory may be scheduled by the department. Refer to Class Schedule.
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 Theory   **(3)**
1½ hours lecture - 4½ hours laboratory
Transfer acceptability: CSU; UC
C-ID ARTS 270
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)**
1½ hours lecture - 4½ hours laboratory
Prerequisite: A minimum grade of 'C' in ART 150 or 260
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 220   Introduction to Painting   **(3)**
1½ hours lecture - 4½ hours laboratory
Prerequisite: A minimum grade of 'C' in ART 102 and 200, or concurrent enrollment in ART 102 and 200
Transfer acceptability: CSU; UC
C-ID ARTS 210
Introduction to principles, elements, and practices of painting. Focus on exploration of painting materials, perceptual skills and color theory, paint mixing and technique, as well as creative responses to materials and subject matter.

ART 221   Painting   **(3)**
1½ hours lecture - 4½ hours laboratory
Prerequisite: A minimum grade of 'C' in ART 220
Transfer acceptability: CSU; UC
Advanced projects in painting concepts and techniques with concentration on individual creative progress and development in the context of art historical, contemporary and non-Western traditions and approaches.

ART 235   Watercolor Painting I   **(3)**
1½ hours lecture - 4½ hours laboratory
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)**
1½ hours lecture - 4½ hours laboratory
Prerequisite: A minimum grade of 'C' in ART 235
Transfer acceptability: CSU; UC
Advanced work in watercolor media.

ART 250   Ceramics III   **(3)**
1½ hours lecture - 4½ hours laboratory
Prerequisite: A minimum grade of 'C' in ART 136
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)**
1½ hours lecture - 4½ hours laboratory
Prerequisite: A minimum grade of 'C' in ART 140
Transfer acceptability: CSU
Advanced theory and practices in casting skills using foundry techniques.

ART 260   Sculpture I   **(3)**
1½ hours lecture - 4½ hours laboratory
Prerequisite: A minimum grade of 'C' in ART 102 and 105, or concurrent enrollment in ART 102 and 105
Transfer acceptability: CSU; UC
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)**
1½ hours lecture - 4½ hours laboratory
Prerequisite: A minimum grade of 'C' in ART 260
Transfer acceptability: CSU; UC
Advanced projects in the concept and creation of original sculpture.

ART 265   Ceramic Sculpture I   **(3)**
1½ hours lecture - 4½ hours laboratory
Prerequisite: A minimum grade of 'C' in ART 102 or 104 or 105, and ART 135
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)**
1½ hours lecture - 4½ hours laboratory
Prerequisite: A minimum grade of 'C' in ART 265
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)**
1½ hours lecture - 4½ hours laboratory
Prerequisite: A minimum grade of 'C' in ART 151
Transfer acceptability: CSU
Continued exploration of the manipulation of metal. Advanced projects in jewelry and metalsmithing.

ART 275   Stained Glass II   **(3)**
1½ hours lecture - 4½ hours laboratory
Prerequisite: A minimum grade of 'C' in ART 155
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 278   Glass Casting II   **(3)**
1½ hours lecture - 4½ hours laboratory
Prerequisite: ART 156
Transfer acceptability: CSU; UC
Intermediate level course provides students with a deeper understanding of glass casting and kilnforming processes. Builds knowledge and techniques to develop individual artistic sensibilities with kiln glass.

ART 280   Glassblowing/Glassforming II   **(3)**
1½ hours lecture - 4½ hours laboratory
Prerequisite: A minimum grade of 'C' in ART 160
Transfer acceptability: CSU
Intermediate level creative exploration and research in fine art applications of hot and cold glass forming techniques.

ART 290   Glassblowing/Glassforming III   **(3)**
1½ hours lecture - 4½ hours laboratory
Prerequisite: ART 280
Transfer acceptability: CSU
An advanced level course exploring creative applications of glass as a professional practice. Emphasis is placed on honing skills and techniques for producing one-of-a-kind objects and production processes. Through hands-on experience, students will gain a deeper understanding of glassblowing and cold glassforming processes for developing unique vessels and sculpture. Provides information on presentation and documentation of glass art relevant to building a portfolio.

ART 295   Directed Study in Art   **(1, 2, 3)**
3, 6, or 9 hours laboratory
Prerequisite: A minimum grade of 'C' in 18 units of college-level art including ART 102, 104 or 105, 165, and 166, and instructor's approval of proposed project or research
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 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
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
Office: D-14
Associate Degree, Certificate of Achievement and Certificate of Proficiency requirements are listed in Section 6 (green pages).

COURSE OFFERINGS

Individual courses are not repeatable. State Regulations (Title 5, Sections 55040-55041) also limit the number of of times a student may take courses with related content and similar primary educational activities. Therefore, some combinations of course work in Art – Design have limitations on the number of times a student may enroll. Specific information about enrollment limitations for Art – Design classes is available at http://www.palomar.edu/schedule/restrictions.htm

ARTD 100   Graphic Design I   **(3)**
1½ hours lecture - 4½ hours 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)**
1½ hours lecture - 4½ hours laboratory
Transfer acceptability: CSU; UC
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)**
1½ hours lecture - 4½ hours laboratory
Prerequisite: A minimum grade of 'C' in ARTD 100
Recommended preparation: ARTD 150
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)**
1½ hours lecture - 4½ hours laboratory
Recommended preparation: ARTD 150
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)**
1½ hours lecture - 4½ hours laboratory
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 240   3D Printing for Artists   **(3)**
1½ hours lecture - 4½ hours laboratory
Recommended Preparation: ARTI 246
Transfer acceptability: CSU
An overview of processes and techniques of 3D printing and its specific application towards both the commercial and fine arts.

Art - Illustration (ARTI)

Contact the Art Department for further information.
760-744-1150, ext. 2302
Office: D-14
Associate Degree, Certificate of Achievement and Certificate of Proficiency requirements are listed in Section 6 (green pages).

COURSE OFFERINGS

Individual courses are not repeatable. State Regulations (Title 5, Sections 55040-55041) also limit the number of times a student may take courses with related content and similar primary educational activities. Therefore, some combinations of course work in Art – Illustration have limitations on the number of times a student may enroll. Specific information about enrollment limitations for Art – Illustration classes is available at http://www.palomar.edu/schedule/restrictions.htm

ARTI 100   Concept Sketching   (3)
1½ hours lecture - 4½ hours laboratory
Transfer acceptability: CSU
Visual concept development through dynamic sketching, ranging from preparatory to presentation drawings. Included is the study of perspective and drawing of mechanical and natural forms and environments by the use of line and value. Emphasis is placed on the progressive development of visual ideas.

ARTI 210   Illustration I - Rendering Techniques   (3)
1½ hours lecture - 4½ hours laboratory
Transfer acceptability: CSU
Content 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)
1½ hours lecture - 4½ hours laboratory
Prerequisite: A minimum grade of 'C' in ARTI 210
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 to 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 246   Digital 3D Design and Modeling   (3)
1½ hours lecture - 4½ hours laboratory
Recommended preparation: ARTD 150
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)
1½ hours lecture - 4½ hours laboratory
Recommended preparation: ARTD 220
Transfer acceptability: CSU
Concepts and techniques of 3-dimensional animation using Maya software. The course will provide an understanding of the production, animation and postproduction process.

ARTI 248 Digital 3D Design and Sculpture   (3)
1½ hours lecture - 4½ hours laboratory
Transfer acceptability: CSU
Concepts and techniques of digital sculpting using ZBrush software. The course will provide an understanding of high detail polygon modeling and the use of mapping techniques to transfer detail to low polygon models.

Astronomy (ASTR)

Contact the Earth, Space, and Environmental Sciences Department for further information.
760-744-1150, ext. 2512
Office: NS-110
Associate Degree, Certificate of Achievement and Certificate of Proficiency requirements are listed in Section 6 (green pages).
For transfer information, consult a Palomar College Counselor.

Planetarium
The Planetarium is part of the Earth, Space, and Aviation Sciences Department at Palomar College. Several types of planetarium programs are offered for the community including school programs for area elementary and secondary schools. The planetarium also offers evening shows throughout each month, open to students of Palomar College and the general public. For further information, visit www.palomar.edu/planetarium or contact the planetarium at planetarium@palomar.edu or (760) 744-1150, ext. 2833.

COURSE OFFERINGS

ASTR 100   Principles of Astronomy   (3)
3 hours lecture
Transfer acceptability: CSU; UC
An introduction to the science of astronomy and the nature of the universe. Topics include observation and movements of celestial bodies, exploration of celestial phenomena, the physics of light, and the nature of stars and galaxies.

ASTR 105L   Introduction to Astronomy Laboratory   (1)
3 hours laboratory
Prerequisite: A minimum grade of 'C' in ASTR 100 or ASTR 120 /GEOL 120, or concurrent enrollment in ASTR 100 or ASTR 120 /GEOL 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 and/or laboratory may be scheduled by the department. Refer to Class Schedule.
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: A minimum grade of 'C' in 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: A minimum grade of 'C' in ASTR 100 or 120
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 Department for further information.
760-744-1150, Ext. 2460
Office: O-10

The intercollegiate athletics program at Palomar College is one of the most comprehensive and diverse among the California Community Colleges, featuring 22 varsity sport programs and over 450 student participants annually. Palomar fields intercollegiate teams in the following men's sports: baseball, basketball, cross country, football, golf, soccer, swimming and diving, tennis, volleyball, water polo, and wrestling. The list of women's sports includes: basketball, cross country, golf, beach volleyball, soccer, softball, swimming and diving, tennis, track and field, volleyball, and water polo. Additionally, the Athletic Department oversees a co-educational cheerleading program. Students must meet the eligibility standards of the California Community College Athletic Association in order to represent the institution athletically.

Prospects for Palomar College intercollegiate athletic teams may not participate in an official practice or competition, nor be issued equipment or apparel from athletic equipment management without departmental verification of the following items:

1. Current and active full-time enrollment in good standing at Palomar College. (Full-time enrollment defined as enrollment in a minimum of 12 semester units, nine (9) of which must be in academic course work leading to a certificated degree and/or transfer to the four-year level.)
2. Qualification of CCCAA athletic and academic eligibility standards.
3. Satisfactory physical examination by a physician (medical doctor) approved by Palomar College.
4. Health insurance evaluation by the Palomar College Athletic Training Staff.
5. Participate in the Palomar College Athletic Academic Advisement Program which includes:
    a. Establishment of an Individual Education Plan by October 15th for Fall-sport athletes and by March 15th for Spring-sport athletes.
    b. Assessment of academic course progress conducted each semester.

INTERCOLLEGIATE ATHLETIC COURSE OFFERINGS

Students enrolled in an Athletic and Competitive Sport are limited to 175 contact hours per year in Kinesiology courses that focus on conditioning or skill development for that respective sport. Specific information about enrollment limitations for Kinesiology classes is available at http://www.palomar.edu/schedule/restrictions.htm

Courses numbered under 100 are not intended for transfer credit.

ACS 50   Introduction to Collegiate Athletics   **(1)**
1 hour lecture
Program for matriculation, eligibility rules, exploring and identifying major emphasis of study, academic success skills, educational planning as it relates to transfer as a student athlete.

ACS 55   Cheerleading   **(1, 2)**
3 or 6 hours laboratory
Prerequisite: Enrollment subject to audition
Note: This class will require travel away from the college on weekends and other dates
Designed to teach the fundamentals of cheerleading. Explores 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.

ACS 101   Intercollegiate Softball   **(3)**
9 hours laboratory
Transfer acceptability: CSU; UC - max credit combined with KINE activity courses, 4 units
Provides women with the opportunity to develop advanced skills and strategies in intercollegiate softball which will be applied to competitive situations.

ACS 110A   Intercollegiate Basketball   **(1.5-2)**
4 ½ - 6 hours laboratory
Transfer acceptability: CSU; UC - max credit combined with KINE activity courses, 4 units
Develop advanced skills and strategies in preseason intercollegiate basketball, which will be applied to competitive situations.

ACS 110B   Intercollegiate Basketball   **(1.5-2)**
4 ½ - 6 hours laboratory
Transfer acceptability: CSU; UC (pending)
Provides men and women with the opportunity to develop advanced skills and strategies in intercollegiate basketball, which will be applied to in-season competitive situations.

ACS 115   Intercollegiate Golf   **(3)**
9 hours laboratory
Transfer acceptability: CSU; UC - max credit combined with KINE activity courses, 4 units
Provides students with the opportunity to develop advanced skills and strategies in intercollegiate golf which will be applied to competitive situations.

ACS 120   Intercollegiate Tennis   **(3)**
9 hours laboratory
Transfer acceptability: *CSU; UC - max credit combined with KINE activity courses, 4 units*
Provides men and women with the opportunity to develop advanced skills and strategies in intercollegiate tennis which will be applied to competitive situations.

ACS 125   Intercollegiate Soccer   **(3)**
9 hours laboratory
Transfer acceptability: CSU; UC - max credit combined with KINE activity courses, 4 units
Provides men and women with the opportunity to develop advanced skills and strategies in intercollegiate soccer which will be applied to competitive situations.

ACS 130   Intercollegiate Volleyball   **(3)**
9 hours laboratory
Transfer acceptability: CSU; UC - max credit combined with KINE activity courses, 4 units
Provides men and women with the opportunity to develop advanced skills and strategies in intercollegiate volleyball which will be applied to competitive situations.

ACS 135　　Intercollegiate Swimming and Diving　　(3)
9 hours laboratory
Transfer acceptability: *CSU; UC - max credit combined with KINE activity courses, 4 units*
This course provides men and women with the opportunity to develop advanced skills and the strategies in intercollegiate swim/diving which will be applied to competitive situations.

ACS 140　　Intercollegiate Water Polo　　(3)
9 hours laboratory
Transfer acceptability: *CSU; UC - max credit combined with KINE activity courses, 4 units*
Provides men and women with the opportunity to develop advanced skills and strategies in intercollegiate water polo which will be applied to competitive situations.

ACS 145　　Intercollegiate Football　　(3)
9 hours laboratory
Transfer acceptability: *CSU; UC - max credit combined with KINE activity courses, 4 units*
Provides students with the opportunity to develop advanced skills and strategies in intercollegiate football which will be applied to competitive situations.

ACS 150　　Intercollegiate Wrestling　　(3)
9 hours laboratory
Transfer acceptability: *CSU; UC - max credit combined with KINE activity courses, 4 units*
Provides students with the opportunity to develop advanced skills and strategies in intercollegiate wrestling which will be applied to competitive situations.

ACS 155　　Intercollegiate Baseball　　(3)
9 hours laboratory
Transfer acceptability: *CSU; UC - max credit combined with KINE activity courses, 4 units*
Provides students with the opportunity to develop advanced skills and strategies in intercollegiate baseball which will be applied to competitive situations.

ACS 160　　Intercollegiate Cross Country　　(3)
9 hours laboratory
Transfer acceptability: *CSU; UC - max credit combined with KINE activity courses, 4 units*
Provides men and women with the opportunity to develop advanced skills and strategies in intercollegiate cross country which will be applied to competitive situations.

ACS 165　　Intercollegiate Track and Field　　(3)
9 hours laboratory
Transfer acceptability: *CSU; UC - max credit combined with KINE activity courses, 4 units.*
This course provides students with the opportunity to develop advanced skills and the strategies in intercollegiate track and field which will be applied to competitive situations.

ACS 180　　Intercollegiate Sand Volleyball　　(3)
9 hours laboratory
Transfer acceptability: *CSU; UC*
Provides women with the opportunity to develop advanced skills and strategies in intercollegiate sand volleyball which will be applied to competitive situations.

ACS 197　　Topics in Athletics and Competitive Sports　　(.5 - 4)
Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture and/or laboratory may be scheduled by the department. Refer to Class Schedule.
Transfer acceptability: *CSU; UC - max credit combined with KINE activity courses, 4 units.*
Topics in Athletics and Competitive Sports. See Class Schedule for specific topic offered. Course title will designate subject covered.

Auto Body (AB)

Contact the Trade and Industry Department for further information.
760-744-1150, ext. 2545
Office: T-102A

COURSE OFFERINGS

AB 50　　Auto Body Repair I　　(3)
(Formerly AT 50)
1½ hours lecture - 4½ hours laboratory
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.

AB 51　　Auto Body Repair II　　(3)
(Formerly AT 51)
1½ hours lecture - 4½ hours laboratory
Recommended preparation: *AB 50*
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.

AB 55　　Auto Refinishing I　　(3)
(Formerly AT 55)
1½ hours lecture - 4½ hours laboratory
Introduction to auto refinishing. Preparation of auto surfaces for refinishing: taping, cleaning, and sanding. Refinishing auto surfaces: sanding, application of primers and paint.

AB 56　　Auto Refinishing II　　(3)
(Formerly AT 56)
1½ hours lecture - 4½ hours laboratory
Recommended preparation: *AB 55*
Skill development in automotive refinishing techniques, including base-coat, clear-coat application; color matching concepts; and identification, prevention and correction of painting problems. New products, techniques, and trends will be covered.

AB 97　　Auto Body Repair/Auto Refinishing Topics　　(.5 - 4)
(Formerly AT 97)
Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture and/or laboratory may be scheduled by the department. Refer to Class Schedule.
Topics in auto body repair and auto refinishing. See Class Schedule for specific topic offered. Course title will designate subject covered.

AB 105　　Chassis Restoration and Assembly　　(3)
(Formerly AT 150)
1½ hours lecture - 4½ hours laboratory
Prerequisite: *A minimum grade of 'C' in AT 100*
Transfer acceptability: *CSU*
Covers basic disassembly and documentation of antique automotive chassis and components. Lab activities will focus on correct detailing and reassembly of vintage automobile chassis and related undercarriage elements.

AB 110　　Body Restoration and Assembly　　(3)
1½ - 4½ hours lecture - 3 hours laboratory
Prerequisite: *AB 50*
Transfer acceptability: *CSU*
Covers basic disassembly and documentation of antique automotive bodies and components. Lab activities will focus on correct detailing, restoration and reassembly of vintage automobiles and related elements, using historically authentic materials and techniques.

Automotive Technology (AT)

Contact the Trade and Industry Department for further information.
760-744-1150, ext. 2545
Office: T-102A
Associate Degree, Certificate of Achievement and Certificate of Proficiency requirements are listed in Section 6 (green pages).

COURSE OFFERINGS

Courses numbered under 100 are not intended for transfer credit.

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)
1 hour lecture - 3 hours laboratory
Corequisite: AT 105L
Transfer acceptability: CSU

Auto electrical systems including basic electrical theory, A.C. generators, batteries, starters, wiring diagrams, and/or electrical troubleshooting and repair.

AT 105L   Automotive Electricity Computer Training Lab   (1)
3 hours laboratory
Corequisite: AT 105
Transfer acceptability: CSU

Students will use training computers to complete assignments in automotive electricity. Hi-tech automotive simulators and trainers will be used to enhance student learning. Software will also be used for Automotive Service Excellence (ASE) certification preparation.

AT 110   Automotive Tune Up and Engine Analysis   (3)
2 hours lecture - 3 hours laboratory
Corequisite: AT 110L
Transfer acceptability: CSU

The use of tune up testing and diagnostic equipment; the study of conventional and electronic ignition systems; compression, cylinder balance, and dynamometer testing.

AT 110L   Automotive Tune Up Computer Training Lab   (1)
3 hours laboratory
Corequisite: AT 110
Transfer acceptability: CSU

Students will use training computers to complete assignments in automotive engine performance. Hi-tech automotive simulators and trainers will be used to enhance student learning. Software will also be used for Automotive Service Excellence (ASE) certification preparation.

AT 115   Automotive Fuel Injection and Fuel Systems   (3)
2 hours lecture - 3 hours laboratory
Corequisite: AT 115L
Transfer acceptability: CSU

The principles, technical knowledge, and work experience in the field of retion and fuel injection. Specific topics include four barrel carburetors; fuel injection; fuel supply systems; and combustion evaluation instruments.

AT 115L   Automotive Fuel Systems Computer Training Lab   (1)
3 hours laboratory
Corequisite: AT 115
Transfer acceptability: CSU

Students will use training computers to complete assignments in automotive fuel systems. Hi-tech automotive simulators and trainers will be used to enhance student learning. Software will also be used for Automotive Service Excellence (ASE) certification preparation.

AT 120   Automatic Transmissions and Drive Lines   (3)
2 hours lecture - 3 hours laboratory
Transfer acceptability: CSU

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)
1½ hours lecture - 4½ hours laboratory
Transfer acceptability: CSU

The various testing and machining operations involved in an automotive machine shop. Areas covered include cylinder head service and repair, connecting rod service, cylinder boring and honing, crankshaft service, and various other automotive machining and measuring techniques.

AT 130   Automotive Brakes   (3)
2 hours lecture - 3 hours laboratory
Transfer acceptability: CSU

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
Transfer acceptability: CSU

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 160   Associated Studies in Automotives   (3)
3 hours lecture
Transfer acceptability: CSU

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 165   Automotive Air Conditioning   (2)
1½ hours lecture - 1½ hours laboratory
Transfer acceptability: CSU

The principles of operation and servicing of modern automotive air conditioning systems. Both lecture and lab time will be devoted to studying the refrigeration and heating system, ventilation and ducting, and the electrical system. Students will complete and receive their refrigerant license as well as be prepared for ASE certification.

AT 170 Auto Repair Shop Experience   (2)
6 hours laboratory
Transfer acceptability: CSU

The student gains valuable skill development in the maintenance, repair and diagnosis in automotive technology. The class runs in a similar format to an actual repair shop where students service cars supplied by the Palomar community.

AT 197   Topics in Automotive   (.5-3)
Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture and/or laboratory may be scheduled by the department. Refer to Class Schedule.
Transfer acceptability: CSU

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

AT 210   Specialized Automotive Electronics   (3)
2 hours lecture - 3 hours laboratory
Recommended preparation: AT 105 or 110
Transfer acceptability: CSU

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*
Transfer acceptability: *CSU*
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 225   Automotive Engine Rebuilding   (3)
2 hours lecture - 4 hours laboratory
Transfer acceptability: *CSU*
The complete rebuilding of at least one automobile engine using the machine tools and techniques of industry.

Biology (BIOL)

Contact the Biology Department for further information.
760-744-1150, ext. 2275
Office: NS-207A
Associate Degree, Certificate of Achievement and Certificate of Proficiency requirements are listed in Section 6 (green pages).

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, 5 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 and BIOL 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, NUTR 165, NUTR 185, and HE 165 combined: maximum credit, one course

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 and/or laboratory may be scheduled by the department. Refer to Class Schedule.
Non-degree Applicable
Topics in Biology. See class schedule for specific topic covered. Course title will designate subject covered.

BIOL 100   Introductory Biology: 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**
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**
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   Introduction Biology: General Biology (Laboratory)   (1)
3 hours laboratory
Prerequisite: *A minimum grade of 'C' in BIOL 101 or 114, or concurrent enrollment in BIOL 101 or 114*
Note: *Not open to students with prior credit in BIOL 100, BIOL 102, BIOL 105, BIOL 106.*
Transfer acceptability: *CSU; UC**
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   Introductory Biology:
              Pre-Nursing and Allied Health   (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, cell division, classical and molecular genetics.

BIOL 105   Introductory Biology: 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   Introductory Biology: Human Emphasis (Lecture)   (3)
3 hours lecture
Note: *Not open to students with prior credit in BIOL 100, 110/110L, 102, 105*
Transfer acceptability: *CSU; UC*
Principles of cellular, organismal and population biology specific to humans.

BIOL 108   Microbiology and Foods   (3)
2 hours lecture - 3 hours laboratory
Note: *Cross listed as FCS 110*
Transfer acceptability: *CSU*
Introduction to the principles of microbiology with an emphasis on foodborne pathogens. Students will explore biological factors and controls relating to reproduction of microorganisms and the effects on public health. This course does not meet microbiology requirement for pre-health students.

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   Introductory Biology: Ecosystems (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   Introductory Biology:
              Ecosystems (Laboratory)   (1, 1.5, 2)**
3, 4½, or 6 hours laboratory
Prerequisite: *A minimum grade of 'C' in BIOL 101 or 114, or concurrent enrollment in BIOL 101 or 114*
Note: *A fee is required, and additional costs may be incurred. Contact the Biology 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   Introductory Biology: Ecology (Lecture)   (3)
3 hours lecture
Transfer acceptability: CSU; UC*
Basic concepts of evolution, population ecology, community ecology, and ecosystem ecology.

BIOL 118L   Introductory Biology: Ecology (Laboratory)   (1)
3 hours laboratory
Prerequisite: A minimum grade of 'C' in BIOL 118, 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 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.

BIOL 125   Introductory Biology: Botany   (4)
3 hours lecture - 3 hours laboratory
Note: Not open to students with prior credit in BIOL 126 or 126L.
Transfer acceptability: CSU; UC – BIOL 125 and 126/126L 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. This is a general education course intended for non-science majors.

BIOL 126   Introductory Biology: Botany (Lecture)   (3)
3 hours lecture
Note: Not open to students with prior credit in BIOL 125
Transfer acceptability: CSU; UC – BIOL 125 and 126//126L 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.

BIOL 126L   Introductory Biology: Botany (Laboratory)   (1)
3 hours laboratory
Prerequisite: A minimum grade of 'C' in BIOL126, or concurrent enrollment in BIOL 126
Note: Not open to students with prior credit in BIOL 125
Transfer acceptability: CSU; UC – BIOL 125 and 126/126L 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.

BIOL 130   Introductory Biology: 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   Introductory Biology: 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   Introductory Biology: Marine Biology (Laboratory)   (1)
3 hours laboratory
Prerequisite: A minimum grade of 'C' in BIOL 131, 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   Introductory Biology: Marine Mammals   (3)
3 hours lecture
Transfer acceptability: CSU; UC
The fundamentals of marine mammal biology are explored. Topics include comparative anatomy, evolution, cladistics, mammalian physiology, ecology and zoogeography, behavior and conservation as they apply to the study of marine mammals.

BIOL 140   Introductory Biology: Zoology   (4)
3 hours lecture - 3 hours laboratory
Note: Not open to students with prior credit in BIOL 141 or 141L
Transfer acceptability: CSU; UC – No credit if taken after BIOL 141/141L
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.

BIOL 141   Introductory Biology: Zoology (Lecture)   (3)
3 hours lecture
Note: Not open to students with prior credit in BIOL 140
Transfer acceptability: CSU; UC – No credit if taken after BIOL 140
Structural and functional adaptations of major groups of the animal kingdom from protozoans through mammals. BIOL 141L laboratory optional.

BIOL 141L   Introductory Biology: Zoology (Laboratory)   (1)
3 hours laboratory
Prerequisite: A minimum grade of 'C' in BIOL 141, or concurrent enrollment in BIOL 141
Note: Not open to students with prior credit in BIOL 140
Transfer acceptability: CSU; UC – No credit for BIOL 141/141L if taken after 140
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.

BIOL 145   Introduction to Anatomy and Physiology   (3)
3 hours lecture
Note: Not open to students with prior credit in BIOL 210 or 211
Transfer acceptability: CSU; UC – BIOL 145/145L and BIOL 106 or BIOL 105 combined: maximum credit, 4 units; UC – No credit for BIOL 145/145L if taken after BIOL 210, or 211
Introduction to the structure and function of human body systems in health and disease. Not recommended for those intending to take BIOL 105, 106, 210, or 211.

BIOL 145L   Introduction to Anatomy and Physiology Laboratory (1)
3 hours laboratory
Prerequisite: A minimum grade of 'C' in BIOL 145 or concurrent enrollment in BIOL 145
Transfer acceptability: CSU; UC – BIOL 145/145L and BIOL 106 or BIOL 105 combined: maximum credit, 4 units; UC – No credit for BIOL 145/145L if taken after BIOL 210, or 211
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, 106, 210, or 211.

BIOL 185   **Science of Human Nutrition**   **(3)**
3 hours lecture
Recommended preparation: *CHEM 110 and BIOL 210 or BIOL 211*
Note: *Cross listed as NUTR 185*
Transfer acceptability: *CSU; UC*
Science of food, nutrients, and other substances. Processes by which humans ingest, digest, absorb, transport, utilize, and excrete foods and nutrients are explored. Emphasis on biological, chemical, and physiological implications to human nutrition and overall health. Current nutrition recommendations and controversies are analyzed from a scientific perspective.

BIOL 195A   **Field Studies in Natural History**   **(1, 1.5, 2, 2.5, 3)**
½-1 hours lecture - 1½-7½ hours laboratory
Prerequisite: *A minimum grade of 'C' in BIOL 100; or BIOL 101; or BIOL 130; or BIOL 131; or BIOL 140; or BIOL 141; or BIOL 114; or BIOL 125; or BIOL 126*
Note: *Fee charged*
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, 1.5, 2, 2.5, 3)**
½-1 hours lecture - 1½-7½ hours laboratory
Prerequisite: *A minimum grade of 'C' in BIOL 100; or BIOL 101; or BIOL 130; or BIOL 131; or BIOL 140; or BIOL 141; or BIOL 114; or BIOL 125; or BIOL 126*
Note: *Fee charged*
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 Study of Native Plants**   **(1, 1.5, 2, 2.5, 3)**
½-1 hours lecture - 1½-7½ hours laboratory
Prerequisite: *A minimum grade of 'C' in BIOL 100 ; or BIOL 101 ; or BIOL 114 ; or BIOL 130 ; or BIOL 131 ; or BIOL 125 ; or BIOL 126 ; or BIOL 140 ; or BIOL 141*
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.

BIOL 195D   **Field Study of Birds**   **(1, 1.5, 2, 2.5, 3)**
½-1 hours lecture - 1½-7½ hours laboratory
Prerequisite: *BIOL 100; or BIOL 101; or BIOL 114; or BIOL 130; or BIOL 131; or BIOL 125; or BIOL 126; or BIOL 140; or BIOL 141*
Note: *Fee charged*
Transfer acceptability: *CSU; UC - Credit determined by UC upon review of course syllabus.*
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.

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 and/or laboratory may be scheduled by the department. Refer to Class Schedule.
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: *A minimum grade of 'C' in CHEM 110 and CHEM 110L*
Transfer acceptability: *CSU; UC**
C-ID BIOL 190
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: *A minimum grade of 'C' in BIOL 200*
Transfer acceptability: *CSU; UC**
C-ID BIOL 140
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 210   **Anatomy**   **(4)**
2 hours lecture - 7 hours laboratory
Recommended Preparation: *BIOL 100 ; or BIOL 101 and BIOL 101L ; or BIOL 102; or BIOL 105; or BIOL 200*
Transfer acceptability: *CSU; UC*
C-ID BIOL 110B
Designed to provide a basic understanding of the structure of the human body. Laboratory includes a study of anatomy through cat and organ dissection, skeletal study, use of models and other visual aids.

BIOL 211   **Physiology**   **(4)**
2 hours lecture - 7 hours laboratory
Prerequisite: *A minimum grade of 'C' in BIOL 102; or BIOL 200 and CHEM 104 or CHEM 100; or BIOL 100 and CHEM 104 or CHEM 100; or BIOL 105 and CHEM 104 or CHEM 100; or BIOL 210*
Transfer acceptability: *CSU; UC*
C-ID BIOL 120B
Principles of human physiology including laboratory exercises. Deals with physiology of muscle, nerve, circulation, respiration, excretion, digestion, the endocrines and exercise.

BIOL 212   **Fundamentals of Microbiology**   **(4)**
2 hours lecture - 7 hours laboratory
Prerequisite: *A minimum grade of 'C' in BIOL 102; or BIOL 200 and CHEM 104 or CHEM 100; or BIOL 100 and CHEM 104 or CHEM 100; or BIOL 105 and CHEM 104 or CHEM 100; or BIOL 101, BIOL 101L and CHEM 104 or CHEM 100; or BIOL 211*
Transfer acceptability: *CSU; UC*
Fundamentals of microbiology including medical aspects of microbiology.

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*
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.

Business (BUS)

See also Accounting, Business Management, International Business, Legal Studies, Real Estate

Contact the Business Administration Department for further information.
760-744-1150, ext. 2488
Office: MD-341
Associate Degree, Certificate of Achievement and Certificate of Proficiency requirements are listed in Section 6 (green pages).
Associate Degrees for transfer IGETC and CSUGE requirements are listed in Section 7 (green pages).

COURSE OFFERINGS

Courses numbered under 100 are not intended for transfer credit.

BUS 80 Medical Terminology and Anatomy (4)
(Formerly OIS 80)
4 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.

BUS 82 Medical Insurance Billing and Coding (3)
(Formerly OIS 82)
3 hours lecture
Recommended preparation: BUS 80
Provides entry level skills in medical insurance, billing, diagnostic and medical procedural coding with CPT-4 and ICD-9 guidelines. Includes compiling and abstracting information from the medical record utilizing computer coding techniques and promoting accurate reimbursement of medical claims. Prepares and utilizes health care claim forms.

BUS 84 Healthcare Writing Techniques (2)
2 hours lecture
Prerequisite: A minimum grade of 'C' in BUS 80
Application of writing skills to common writing situations found in various medical settings following HIPAA rules and standards. Includes the writing of medical letters, memos, and emails; medical records including charting and documenting; a variety of medical reports; meeting minutes; research and manuscripts.

BUS 86 Electronic Health Record Applications (2)
(Formerly OIS 86)
2 hours lecture
Recommended preparation: BUS 80
Application of technology in the health care industry. Includes overview of EHR software; privacy, confidentiality, and security of the EHR; transitioning from paper charts to the EHR; administrative use of the EHR; using the EHR for reimbursement; the EHR role in health promotion and patient education; and, the personal health record and patient advocacy.

BUS 88 Medical Office Administration (3)
(Formerly OIS 88)
3 hours lecture
Recommended preparation: BUS 80
Designed to prepare students for employment as a medical administrative assistant. Topics include the career of a medical administrative assistant; the health care team; medical law and ethics; patient diversity, communications, appointment scheduling, and reception/registration; patient services of HIM, HIPAA, medical billing, health insurance and benefits (CMS-1500, Tricare, CHAMPVA, COBRA); directing the activities of the medical office (business operations, financial management, and human resource management); and, job search essentials.

BUS 100 Introduction to Business (3)
3 hours lecture
Transfer acceptability: CSU; UC
C-ID BUS 110
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 104 Business Information Systems (3)
3 hours lecture
Transfer acceptability: CSU
C-ID BUS 140
Examination of information systems and their role in business. Focus on information systems, database management systems, networking, e-commerce, ethics and security, computer systems hardware and software components. Application of these concepts and methods through hands-on projects developing computer-based solutions to business problems.

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, LS 121 combined: maximum credit, one course
Law in its relationships to business contracts, agency, bailment, and sales.

BUS 117 Legal Environment of Business (3)
3 hours lecture
Transfer acceptability: CSU; UC – BUS 115, 116, 117, LS 121 combined: maximum credit, one course
C-ID BUS 120
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 125 Business English (3)
3 hours lecture
Transfer acceptability: CSU
Practical approaches to solving the commonly made errors in English language usage, as specifically applied to business-oriented material. Coverage includes vocabulary, spelling, grammar, idioms, sentence structure, and punctuation.

BUS 129 Principles of Logistics (3)
3 hours lecture
Transfer acceptability: CSU
Explore how supply chain management impacts all of the areas and processes of the firm and its supply chain trading partners. Focus on how managers can improve their firm's competitive position by employing the practice in the various areas of supply chain and to satisfy its customers.

BUS 130 Principles of 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   Money Management and Planning for the Future   (3)
3 hours lecture
Note: *Cross listed as FCS 136*
Transfer acceptability: *CSU/UC*
An integrated approach to personal finance that focuses on practical financial decision-making, as well as the physiological, psychological and sociological contexts in which those decisions are made. Topics include money management, taxes, financial services, consumer credit, consumer purchasing strategies, housing, property and automobile insurance, health and disability insurance, life insurance, investment analysis and retirement and estate planning.

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 defendable. 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 142   Customer Service   (1)
1 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 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 152   Social Media for Business   (3)
3 hours lecture
Transfer acceptability: *CSU*
Explores social media use from a business perspective. Students learn how to develop a social media strategy to promote business, build strong customer relationships, and coordinate a common message across multiple channels. Strategic and tactical review of the major social networking platforms will be reviewed in order to drive business goals and create a personal brand online.

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 165   Beginning Keyboarding   (2)
1 hour lecture - 3 hours laboratory
Note: *May be open entry/open exit*
Transfer acceptability: *CSU*
Introduction to basic business document formatting. Touch-typing of alphabetic, numeric, and symbol keys on a computer keyboard. Includes development of speed and accuracy on straight copy.

BUS 166   Intermediate Keyboarding   (2)
1 hour lecture - 3 hours laboratory
Recommended preparation: *BUS 165, or a keyboarding speed of 30 net words per minute*
Transfer acceptability: *CSU*
Continued development of higher speed and accuracy timed writing goals from BUS 165. Emphasis is placed on production of a variety of more complicated multipage business documents and forms.

BUS 170   Word for Business – Basic   (1)
½ hour lecture - 1½ hours laboratory
Recommended preparation: *A keyboarding speed of 20 net words a minute*
Note: *May be open entry/open exit*
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; borders and special characters; footnotes and endnotes; draw objects and graphics; hyperlinks; styles and templates; outlines; smart tags; and headers/footers. Class Schedule will designate software package covered.

BUS 171   Word for Business – Advanced   (1)
½ hour lecture - 1½ hours laboratory
Recommended preparation: *BUS 170*
Note: *May be open entry/open exit*
Transfer acceptability: *CSU*
Refinement of basic word processing skills and practice of the more sophisticated software features of merge; labels; fields; index and table of contents; macros; master and subdocuments; customizing Word; on-screen forms; charts; bookmarks and cross-referencing; creating and editing Word web pages; comparing and merging documents; linking and embedding objects; and tracking changes. In addition, more advanced printing, file management, and integration of related software will be covered. The Class Schedule will designate software version covered.

BUS 173   Contemporary Job Search Techniques   (1)
½ hour lecture - 1½ hours laboratory
Transfer acceptability: *CSU*
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 digital resume and digital cover letters; interview strategies and mock interviews; industry speakers, and hard copy and online portfolios.

BUS 175   Excel Basic   (1)
½ hour lecture - 1½ hours laboratory
Recommended preparation: *BUS 110*
Note: *May be open entry/open exit*
Transfer acceptability: *CSU*
Introduction to a currently used computer spreadsheet application program. Concepts include defining, designing and navigating spreadsheets; creating, editing, formatting, and printing spreadsheets; working with formulas and functions; and working with charts and graphics. A variety of spreadsheets will be created and edited within practical applications designed for the business environment. Class Schedule will designate software package covered.

BUS 176   Excel Intermediate   (1)
½ hour lecture - 1½ hours laboratory
Recommended preparation: BUS 175 or Equivalent
Note: May be open entry/open exit
Transfer acceptability: CSU
Development of intermediate spreadsheet skills to manipulate worksheet content using a current computer spreadsheet application program. Intermediate concepts include working with lists, filtering, conditional formatting, pivot tables/charts, worksheet groups, workbook templates, lookup functions, auditing tools, document sharing features, macro basics, and publishing to a web page. Concepts are introduced using practical applications designed for the business environment. Class schedule will designate software package covered.

BUS 177   Excel Advanced   (1)
½ hour lecture - 1½ hours laboratory
Recommended preparation: A minimum grade of 'C' in BUS 176 or Equivalent
Note: May be open entry/open exit
Transfer acceptability: CSU
Development of advanced skills using a current computer spreadsheet application program. Advanced concepts and skills include performing complex analyses using data tables, arrays, scenarios, goal seek and problem-solving tools, and application add-ins; importing data from external sources including text, database, schema, XML, and web files and real-time sources; defining queries; and, writing and executing macros and sub-routines. Concepts and software features are introduced applying practical applications designed for the business environment. Class schedule will designate software package covered.

BUS 180   Access Basic   (1)
½ hour lecture - 1½ hours laboratory
Note: May be open entry/open exit
Transfer acceptability: CSU
Introduction to a currently used computer database program. Skills include planning, designing, and using a database; tables; forms and sub forms; reports; queries; and relationships within practical applications designed for the business environment. Class Schedule will designate software package covered.

BUS 181   Access Intermediate   (1)
½ hour lecture - 1½ hours laboratory
Prerequisite: A minimum grade of 'C' in BUS 180
Transfer acceptability: CSU
Study and application of Microsoft Office Access including creating advanced queries and enhancing table design; creating custom forms; creating custom reports; and, importing, exporting, linking and analyzing data.

BUS 182   Access Advanced   (1)
½ hour lecture - 1½ hours laboratory
Prerequisite: A minimum grade of 'C' in BUS 181
Transfer acceptability: CSU
Advanced application of Microsoft® Office Access including applying action queries and advanced table relationships; creating macros; and managing and securing databases at the user level.

BUS 185   PowerPoint for Business   (1)
½ hour lecture - 1½ hours laboratory
Note: May be open entry/open exit
Transfer acceptability: CSU
Introduction to a currently used computer presentations program to produce effective presentations using overheads, 35mm photographic slides, or on-screen slides. Skills include defining and designing presentations; preparing slides using the slide, slide sorter, outline, notes page, and slide show views; formatting and animating the presentation; and applying templates within practical applications applied to the business environment. Class Schedule will designate software package covered.

BUS 187   Project for Business   (1)
½ hour lecture - 1½ hours laboratory
Note: May be open entry/open exit
Transfer acceptability: CSU
Hands-on application with Microsoft Project, a comprehensive software package that includes the processes of initiating, planning, executing, controlling, and closing a project to meet project goals. Students will identify ways of completing projects more efficiently and effectively by covering the topics of planning a project; creating a project schedule; communicating project information; assigning resources and costs to a project; tracking the progress of and closing a project; and, sharing project information with other people and applications.

BUS 189   Beyond Outlook Essentials   (1)
½ hour lecture - 1½ hours laboratory
Note: May be open entry/open exit
Transfer acceptability: CSU
Comprehensive study of Outlook, an information management and communication program. In-depth study of Outlook used in intra- and internet environments, for organizational and communication purposes. Outlook terminology and concepts, and applications and projects for organizational intranets and the World Wide Web.

BUS 190   Internet for Business   (1)
½ hour lecture - 1½ hours laboratory
Note: May be open entry/open exit
Transfer acceptability: CSU
Basic concepts of navigating the Internet and Intranet including terminology; browsing and searching the web with emphasis on evaluating the credibility of search results; dedicated e-mail systems and web-based email services; social media; portals and accessing a variety of online resources; overview of internet technologies and security issues; and, practical applications designed for the business environment. In addition, the basics of e-Commerce are covered.

BUS 197   Business Topics   (.5 - 4)
Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture and/or laboratory may be scheduled by the department. Refer to Class Schedule.
Transfer acceptability: CSU
Topics in Business. See Class Schedule for specific topic offered. Course title will designate subject covered.

BUS 204   Quantitative Business Analysis   (4)
4 hours lecture
Prerequisite: MATH 56 or MATH 60 or eligibility determined through the math placement process.
Recommended Preparation: BUS 175 or equivalent
Transfer acceptability: CSU/UC
The applied science of basing business decisions on numerical data that can be used to reduce risk in customer, product, investment, and other significant operational and strategic business decisions. Descriptive statistics (tabular, numerical, and graphical) and inferential statistics (random sampling, sampling distributions, probability distributions, hypothesis testing, linear regression, t-tests) are used within the context of business decisions. Makes extensive use of technology, including spreadsheets and other software tools, for analyzing data. Designed for students majoring in business or economics.

BUS 205   Business Communication   (3)
3 hours lecture
Prerequisite: A minimum grade of 'C' in English 100
Transfer acceptability: CSU
C-ID BUS 115
This course applies the principles of ethical and effective communication to the creation of letters, memos, emails, and written and oral reports for a variety of business situations. The course emphasizes planning, organizing, composing, and revising business documents using word processing software for written documents and presentation-graphics software to create and deliver professional-level oral reports. This course is designed for students who already have college-level writing skills.

Business International
See International Business

Business Management (BMGT)
Contact the Business Administration Department for further information.
760-744-1150, ext. 2488
Office: MD-341
Associate Degree, Certificate of Achievement and Certificate of Proficiency requirements are listed in Section 6 (green pages).

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 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 153   Small Business Entrepreneurship   (3)
3 hours lecture
Transfer acceptability: CSU
An introduction to the creative and innovative managerial practices of successful entrepreneurship. Developing the necessary understanding to design, start, and manage a successful entrepreneur business. An overview of entrepreneurial process and investigate concepts tools and practices associated with identifying or creating new venture opportunities.

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 and/or laboratory may be scheduled by the department. Refer to Class Schedule.
Transfer acceptability: CSU
Topics in Business Management. See Class Schedule for specific topic offered. Course title will designate subject covered.

BMGT 295   Directed Study in Business Management   (1, 2, 3)
3, 6 or 9 hours laboratory
Prerequisite: *Approval of project or research by the instructor and Department Chair*
Transfer acceptability: CSU
Independent study for students who have demonstrated skills and or proficiencies in business management subjects and have the initiative to work independently on projects outside the context of regularly scheduled classes. Students will work under the supervision of an instructor.

Cabinet and Furniture Technology (CFT)
Contact the Trade and Industry Department for further information.
760-744-1150, ext. 2545
Office: T-102A
Associate Degree, Certificate of Achievement and Certificate of Proficiency requirements are listed in Section 6 (green pages).
For transfer information, consult a Palomar College Counselor.

COURSE OFFERINGS

Courses numbered under 100 are not intended for transfer credit.

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 and/or laboratory may be scheduled by the department. Refer to Class Schedule.
Topics in Cabinet and Furniture Technology. See Class Schedule for specific topic covered. Course title will designate subject covered.

CFT 100   Fundamentals of Woodworking   (3, 4)
1½ or 2 hours lecture - 4½, or 6 hours 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   (3, 4)
1½ or 2 hours lecture - 4½, or 6 hours laboratory
Prerequisite: *A minimum grade of 'C' in CFT 100*
Transfer acceptability: CSU
Study, design, and development of practical applications for basic cabinet construction as utilized by the wood products industry. Includes partitions, face frame, carcase, and basic door and drawer construction. Operation of woodworking machines, tools and processes, techniques, and care and suitability of tools and machines.

CFT 108   Business Woodworking   (2, 3, 4)
2, 3, or 4 hours lecture
Transfer acceptability: CSU
Prepare woodworkers to start and run a business. Topics include developing a business plan, strategies for shop efficiency, and tax and legal requirements.

CFT 110A   Period Case Furniture Design   (3, 4)
1½ or 2 hours lecture - 4½, or 6 hours laboratory
Prerequisite: *A minimum grade of 'C' in CFT 105*
Transfer acceptability: CSU
Focus is on the design of a period furniture project. Use of advanced level of joinery utilizing design; mortise and tenon; dovetails; frame and panel; and other joinery used in period case furniture.

CFT 110B   Contemporary Case Furniture Design   (3 - 4)
1½ - 2 hours lecture - 4½ - 6 hours laboratory
Prerequisite: A minimum grade of 'C' in CFT 105
Transfer acceptability: CSU
Design of a contemporary furniture project. Use advanced level of joinery utilizing design; mortise and tenon; dovetails; frame and panel; and other joinery used in contemporary case furniture.

CFT 111A   Period Case Furniture Production   (3, 4)
1½ or 2 hours lecture - 4½, or 6 hours laboratory
Prerequisite: A minimum grade of 'C' in CFT 110A
Transfer acceptability: CSU
Production phase of period case furniture. Emphasis is on the completion of a solid wood period case furniture piece. Includes details such as traditional joinery; door and drawer construction methods; furniture hardware; and various finishing choices. Creation of special molding and spindle turnings for decorating the carcase will also be explored.

CFT 111B   Contemporary Case Furniture Production   (3, 4)
1½ or 2 hours lecture - 4½, or 6 hours laboratory
Prerequisite: A minimum grade of 'C' in CFT 110B
Transfer acceptability: CSU
Production phase of contemporary case furniture. Emphasis is on the completion of a solid wood contemporary case furniture piece. Includes traditional joinery; door and drawer construction; furniture hardware; finishing choices; and wood lamination. Creation of special molding and spindle turnings and CNC milling will also be explored.

**CFT 112   CNC I - Introduction Design Software and
               CNC Milling   (2-4)**
1-2 hours lecture – 3-6 hours laboratory
Corequisite: CFT 100
Transfer acceptability: CSU
Students are introduced to design software and its use in operating computer numerical control (CNC) milling machines for wood products manufacturing processes. Topics include software introduction and use, preparing CNC machines for; tool path instructions, use, and operation. Emphasis is placed on design, planning, safety, and CNC machine set up, use and operational manufacturing standards.

CFT 118   Furniture Design Development   (2)
1 hour lecture - 3 hours laboratory
Transfer acceptability: CSU
Fundamental elements and principles of design while developing unique design methodologies and creative practices. Practical skills such as sketching, drawing, drafting, and model making will be stressed. In addition, students will explore wood as a creative medium by experimenting with a variety of surface textures and treatments.

CFT 120   Advanced Furniture Lab   (.5, 1, 1.5, 2, 2.5, 3)
1½, 3, 4½, 6, 7½, or 9 hours laboratory
Prerequisite: A minimum grade of 'C' in CFT 100
Transfer acceptability: CSU
Laboratory for students who need additional lab time to complete difficult, complex projects. Students will work under the supervision of an instructor.

CFT 122   Cabinetmaking Construction Lab   (.5, 1, 1.5, 2, 2.5, 3)
1½, 3, 4.5, 6, 7½, or 9 hours laboratory
Prerequisite: A minimum grade of 'C' in CFT 100
Transfer acceptability: CSU
Laboratory for students who need additional lab time to complete difficult cabinetry and other complex projects. Students will work under the supervision of an instructor.

CFT 124   Chair and Table Construction Lab   (.5, 1, 1.5, 2, 2.5, 3)
1½, 3, 4½, 6, 7½, or 9 hours laboratory
Prerequisite: A minimum grade of 'C' in CFT 100
Transfer acceptability: CSU
Provides additional laboratory time to complete complex projects required in other classes.

CFT 128   Stringed Instruments Lab   (.5, 1, 1.5, 2, 2.5, 3)
1½, 3, 4½, 6, 7½, or 9 hours laboratory
Prerequisite: A minimum grade of 'C' in CFT 100
Transfer acceptability: CSU
Laboratory for students who need additional lab time to complete difficult stringed instruments or other complex projects. Students will work under the supervision of an instructor.

CFT 132A   Ukulele Making I/Tenor Ukulele   (3-5)
1½ - 2½ hours lecture - 4½ - 7½ hours laboratory
Prerequisite: A minimum grade of 'C' in CFT 100
Transfer acceptability: CSU
Introduction to the processes and construction details for building a tenor ukulele. Major topics include acoustic theory and mill and fabrication of components for stringed instruments. Each student must complete an individual tenor ukulele.

CFT 132B   Ukulele Making II   (3-5)
1½ - 2½ hours lecture - 4 - 7½ hours laboratory
Prerequisite: A minimum grade of 'C' in CFT 132A, or concurrent enrollment in CFT 132A
Transfer acceptability: CSU
Students will construct an ukulele while concurrently preparing jigs, molds and fixtures for ukulele production. Students will also explore advance techniques of embellishment and various ukulele models.

CFT 133A   Guitar Technician I/Set-Up   (2-4)
1 - 2 hours lecture - 3 - 6 hours laboratory
Prerequisite: A minimum grade of 'C' in CFT 100
Transfer acceptability: CSU
Techniques are used to analyze and diagnose common guitar repair issues. Determine options and techniques in the repair of common problems, with an emphasis on basic set-up and minor repair. A basic preparation course for guitar repair technician positions.

CFT 133B   Guitar Technician II/Major Repair   (2-4)
1 - 2 hours lecture - 3 - 6 hours laboratory
Prerequisite: A minimum grade of 'C' in CFT 133A
Transfer acceptability: CSU
Use techniques to analyze and diagnose common guitar repair issues. Determine options and techniques in the repair of common problems; with an emphasis on major repair and advanced set-up. A preparation course for guitar repair technician positions.

CFT 134A   Electric Guitar Construction I/Solid Body   (2-4)
1, 1½, or 2 hours lecture - 3, 4½, or 6 hours laboratory
Prerequisite: A minimum grade of 'C' in CFT 100
Transfer acceptability: CSU
The construction of a simple solid body electric guitar, either a "strat" or "tele" style, provides basic processes and construction details involved in the building of electric guitars, as well as the basic electronics. Skills gained in other CFT courses will be used to mill and fabricate parts. Production work and completion of an electric guitar are required. Excellent woodworking skills are essential. An extremely demanding and fast-paced course.

CFT 134B   Electric Guitar Construction II/Custom   (2-4)
1 - 2 hours lecture - 3 - 6 hours laboratory
Prerequisite: A minimum grade of 'C' in CFT 134A
Transfer acceptability: CSU
Construction of a contour top electric guitar, such as a "Les Paul" style or a semi-hollow body guitar. Provides processes and construction details involved in the building of high-end and custom electric guitars, as well as the basic electronics. Skills gained in other CFT courses will be used to mill and fabricate parts. Production work and completion of an electric guitar are required. Excellent woodworking skills are essential. An extremely demanding and fast-paced course. Students will also be encouraged to build jigs forms and fixtures to aid in production.

CFT 135   Acoustic Guitar Making I   (3, 4, 5)
1½, 2, or 2½ hours lecture - 4½, 6, or 7½ hours laboratory
Prerequisite: A minimum grade of 'C' in CFT 100
Transfer acceptability: CSU
First course of a two-semester sequence. Prepares students for a career as a luthier while studying the history, anatomy, construction methods, design, tone, and sound theory of acoustic guitars. Construction of either a nylon string or steel string acoustic guitar is required. Considerable prior woodworking/instrument making experience is recommended.

CFT 136   Acoustic Guitar Making II   (3, 4, 5)
1½, 2, or 2½ hours lecture - 4½, 6, or 7½ hours laboratory
Prerequisite: A minimum grade of 'C' in CFT 135
Transfer acceptability: CSU
Second course of a two-semester sequence. Prepares students for a career as a luthier while studying the history, anatomy, construction methods, design, tone, and sound theory of acoustic guitars. Construction of either a nylon string or steel string acoustic guitar is required. Considerable prior woodworking/instrument making experience is recommended.

CFT 137   Arch Top Guitar Construction I   (3, 4, 5)
1½, 2, or 2½ hours lecture - 4½, 6, or 7½ hours laboratory
Prerequisite: A minimum grade of 'C' in CFT 100
Transfer acceptability: CSU
First course of a two-semester sequence. Prepares students for a career as a luthier while studying the history, anatomy, construction methods, design, tone, and sound theory of acoustic guitars. Construction of an Arch Top Guitar (somewhat like a violin with the front and back plates carved to a thin arched shape from thick stock) is required. Considerable prior woodworking/instrument making experience is recommended.

CFT 138   Arch Top Guitar Construction II   (3, 4, 5)
1½, 2, or 2½ hours lecture - 4½, 6, or 7½ hours laboratory
Prerequisite: A minimum grade of 'C' in CFT 137
Transfer acceptability: CSU
Second course of a two-semester sequence. Prepares students for a career as a luthier while studying the history, anatomy, construction methods, design, tone, and sound theory of acoustic guitars. Construction of an Arch Top Guitar (somewhat like a violin with the front and back plates carved to a thin arched shape from thick stock) is required. Considerable prior woodworking/instrument making experience is recommended.

CFT 142   The Art and Craft of Planemaking   (1, 2, 3)
½, 1, or 1½ hours lecture - 1½, 3, or 4½ hours laboratory
Prerequisite: A minimum grade of 'C' in CFT 100
Transfer acceptability: CSU
Teaches 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)
1, 1½ or 2 hours lecture - 3, 4½, or 6 hours laboratory
Prerequisite: A minimum grade of 'C' in CFT 105
Transfer acceptability: CSU
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 Wood Products I   (1, 2, 3, 4)
½ or 1, 1½ or 2 hour lecture - 1½ or 3, 4½, or 6 hours laboratory
Prerequisite: A minimum grade of 'C' in CFT 100
Transfer acceptability: CSU
Methods and techniques of high production manufacturing are learned through lecture, demonstration and extensive lab work in a production mode. The wood products manufactured in this course may be donated to local charities.

CFT 145   Production Wood Products II   (1, 2, 3, 4)
½ or 1, 1½ or 2 hour lecture - 1½ or 3, 4½, or 6 hours laboratory
Prerequisite: A minimum grade of 'C' in CFT 144
Transfer acceptability: CSU
Students will be Team Leaders/Managers in design, planning, time and material managements, and production. Includes organizing schedules, material flow, and production techniques. The wood products manufactured in this course may be donated to local charities.

CFT 148   Marquetry, Inlay and Veneering   (2, 3, 4)
1, 1½, or 2 hours lecture - 3, 4½, or 6 hours laboratory
Prerequisite: A minimum grade of 'C' in CFT 100 and CFT 151
Transfer acceptability: CSU
Examines the history of Marquetry. Students will use the tools necessary to complete a Marquetry project which includes: veneer hammer, hide and other glues, veneer tape, scroll saw, veneer saw and related tools and equipment. The various methods of cutting veneers will be examined as well as methods for cutting, assembling and installing inlay.

CFT 149   Hand Joinery I   (2, 3, 4)
1, 1½, or 2 hours lecture - 3, 4½, or 6 hours laboratory
Prerequisite: A minimum grade of 'C' in CFT 105
Transfer acceptability: CSU
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 carcase.

CFT 151   Veneering Technology I   (2, 3, 4)
1, 1½, or 2 hours lecture - 3, 4½, or 6 hours laboratory
Prerequisite: A minimum grade of 'C' in CFT 105
Transfer acceptability: CSU
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)
1, 1½, or 2 hours lecture - 3, 4½, or 6 hours laboratory
Prerequisite: A minimum grade of 'C' in CFT 151
Transfer acceptability: CSU
Advanced veneering techniques which include working with radius shapes, hand and machine, hammer veneering, and installation of bandings and stringings. Demonstration of abilities will be required with the construction of a small piece of furniture.

CFT 153   Studio Furniture Design I   (2)
1 hour lecture - 3 hours laboratory
Prerequisite: A minimum grade of 'C' in CFT 105
Transfer acceptability: CSU
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 155   Classic American Chair Designs   (2, 3, 4)
1, 1½, or 2 hours lecture - 3, 4½, or 6 hours laboratory
Transfer acceptability: CSU
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)
1, 1½, or 2 hours lecture - 3, 4½, or 6 hours laboratory
Prerequisite: *A minimum grade of 'C' in CFT 155*
Transfer acceptability: *CSU*
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 159A   Chair and Tables/Prototype Construction I   (2, 3, 4)
1, 1½, or 2 hours lecture - 3, 4½, or 6 hours laboratory
Prerequisite: *A minimum grade of 'C' in CFT 105*
Transfer acceptability: *CSU*
An in-depth study of production chair making. History of chairs making and seating. Design and application of pattern-making techniques on student-selected projects.

CFT 159B   Chair and Tables/Prototype Construction II   (2, 3, 4)
1, 1½, or 2 hours lecture - 3, 4½, or 6 hours laboratory
Prerequisite: *A minimum grade of 'C' in CFT 105*
Transfer acceptability: *CSU*
Table design and construction. Covers the history of table making. Design and application of pattern making techniques on student-selected projects. Machine tool operations necessary to produce various table leg, trussel, and base designs.

CFT 160A   Chairs and Tables/Production Manufacturing I   (2, 3, 4)
1, 1½, or 2 hours lecture - 3, 4½, or 6 hours laboratory
Prerequisite: *A minimum grade of 'C' in CFT 159A*
Transfer acceptability: *CSU*
Second semester of a two-semester class (CFT 159A and CFT 160A). Chair and seating construction production and advanced machine tool techniques are used as they relate to chair making. Fine joinery, theory and advanced techniques.

CFT 160B   Chairs and Tables/Production Manufacturing II   (2, 3, 4)
1, 1½, or 2 hours lecture - 3, 4½, or 6 hours laboratory
Prerequisite: *A minimum grade of 'C' in CFT 159B*
Transfer acceptability: *CSU*
Second semester of a two-semester class (CFT 159B and CFT 160B). 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   (1, 2)
½ or 1 hour lecture - 1½ or 3 hours laboratory
Transfer acceptability: *CSU*
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 165A   Cabinetry Design/Face Frame   (2, 3, 4)
1, 1½, or 2 hours lecture - 3, 4½, or 6 hours laboratory
Prerequisite: *A minimum grade of 'C' in CFT 105*
Transfer acceptability: *CSU*
First course of a two-semester sequence (CFT 165A and CFT 167A). Emphasis is on face frame cabinets. Study of the principles of traditional and European styles of cabinetmaking as used to construct and install cabinetry in residential and commercial applications, with preference given to residential applications.

CFT 165B   Cabinetry Design/European   (2, 3, 4)
1, 1½, or 2 hours lecture - 3, 4½, or 6 hours laboratory
Prerequisite: *A minimum grade of 'C' in CFT 105*
Transfer acceptability: *CSU*
First course of a two-semester sequence (CFT 165B and CFT 167B). With an emphasis on European 32mm cabinets. Study of the principles of traditional and European styles of cabinetmaking as used to construct and install cabinetry in residential and commercial applications, with preference given to residential applications.

CFT 167A   Cabinetry Production/Face Frame   (2, 3, 4)
1, 1½, or 2 hours lecture - 3, 4½, or 6 hours laboratory
Prerequisite: *A minimum grade of 'C' in CFT 165A*
Transfer acceptability: *CSU*
Second course of a two-semester sequence. Students will learn and apply the construction methods and installation processes of face frame cabinets by constructing the cabinets designed in CFT 165A.

CFT 167B   Cabinetry Production/European   (2, 3, 4)
1, 1½, or 2 hours lecture - 3, 4½, or 6 hours laboratory
Prerequisite: *A minimum grade of 'C' in CFT 165B*
Transfer acceptability: *CSU*
Second course of a two-semester sequence (CFT 165B and CFT 167B). Students will learn and apply the construction methods and installation processes of European style 32mm cabinets by constructing the cabinets designed in CFT 165B.

CFT 168   Cabinetmaking/Architectural Millwork   (2, 3, 4)
1, 1½, or 2 hours lecture - 3, 4½, or 6 hours laboratory
Prerequisite: *A minimum grade of 'C' in CFT 105*
Transfer acceptability: *CSU*
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   (2, 3)
1 or 1½ hours lecture - 3 or 4½ hours laboratory
Prerequisite: *A minimum grade of 'C' in CFT 105*
Transfer acceptability: *CSU*
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)
1, 1½, or 2 hours lecture - 3, 4½, or 6 hours laboratory
Prerequisite: *A minimum grade of 'C' in CFT 100*
Transfer acceptability: *CSU*
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 172   CAD for Cabinets & Furniture   (2, 3, 4)
1, 1½, or 2 hours lecture - 3, 4½, or 6 hours laboratory
Transfer acceptability: *CSU*
Introduction to basic CAD concepts and their direct application to the design and drawing of custom cabinets and furniture, as an alternative to hand drawn plans and a starting point to Computer Assisted Manufacturing.

CFT 175 Jigs/Fixtures and Routers (2, 3, 4)
1, 1½, or 2 hours lecture - 3, 4½, or 6 hours laboratory
Prerequisite: A minimum grade of 'C' in CFT 105
Transfer acceptability: CSU
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 176 The Lathe - An Introduction to Woodturning (2, 3, 4)
1, 1½, or 2 hours lecture - 3, 4½, or 6 hours laboratory
Prerequisite: A minimum grade of 'C' in CFT 100
Transfer acceptability: CSU
Emphasis on Spindle Turning or turning Between Centers. Students will learn the history of the lathe; the components of the lathe and how to select the best lathe and accessories for their particular turning style. Discussion of tool selection, proper tool sharpening techniques, what to expect from a basic set of turning tools with emphasis on the skew, the gouge, the parting tool and importantly – the handle. Design and fabrication of tool handles, including tool making and tool modification. Additionally, projects will include turning a mallet, tool handles, kitchen utensils, "weed vases" and ornaments. Introduction to bowl turning and turning other than solid wood such as laminates and acrylics.

CFT 177 Lathe II - Intermediate Turning (2, 3, 4)
1, 1½, or 2 hours lecture - 3, 4½, or 6 hours laboratory
Prerequisite: A minimum grade of 'C' in CFT 176
Transfer acceptability: CSU
The study of architectural turning in relation to furniture making and overall advanced turning techniques. Discussion of tool selection, proper tool sharpening techniques, what to expect from a basic set of turning tools, with emphasis on the skew, gouge, parting tool, and an introduction to specialty turning tools. Split turning, offset turning, multi-axis turning, and duplication will be introduced.

CFT 178 Lathe III - Advanced Turning (2, 3, 4)
1, 1½, or 2 hours lecture - 3, 4½, or 6 hours laboratory
Prerequisite: A minimum grade of 'C' in CFT 177
Transfer acceptability: CSU
Continuation of Lathe II - Intermediate Turning. Exploration of techniques and material in-depth, and focus on mastery.

CFT 180 Wood Bending and Lamination/ (2, 3, 4)
** Wood Technology**
1, 1½, or 2 hours lecture - 3, 4½, or 6 hours laboratory
Prerequisite: A minimum grade of 'C' in CFT 105
Transfer acceptability: CSU
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)
1, 1½, or 2 hours lecture - 3, 4½, or 6 hours laboratory
Prerequisite: A minimum grade of 'C' in CFT 100
Transfer acceptability: CSU
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 187 Introduction to Carving (2, 3, 4)
1, 1½, or 2 hours lecture - 3, 4½, or 6 hours laboratory
Transfer acceptability: CSU
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 (2, 3, 4)
1, 1½, or 2 hours lecture - 3, 4½, or 6 hours laboratory
Prerequisite: A minimum grade of 'C' in CFT 187
Transfer acceptability: CSU
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 (2, 3, 4)
1, 1½, or 2 hours lecture - 3, 4½, or 6 hours laboratory
Transfer acceptability: CSU
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 195 Finishing Technology/Touch Up and Repair (2, 3, 4)
1, 1½, or 2 hours lecture - 3, 4½, or 6 hours laboratory
Prerequisite: A minimum grade of 'C' in CFT 100
Transfer acceptability: CSU
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 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 and/or laboratory may be scheduled by the department. Refer to Class Schedule.
Transfer acceptability: CSU
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)
1, 1½, or 2 hours lecture - 3, 4½, or 6 hours laboratory
Prerequisite: A minimum grade of 'C' in CFT 195
Transfer acceptability: CSU
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 212 CNC I - Intermediate Design Software and (2-4)
** CNC Milling**
1-2 hours lecture – 3-6 hours laboratory
Prerequisite: A minimum grade of 'C' or concurrent enrollment in CFT 112
Transfer acceptability: CSU
This course builds on CNC I course to further develop student's skill in the use of design software and its use in operating computer numerical control (CNC) milling machines for wood products manufacturing processes. Topics include software introduction and use, preparing CNC machines for; tool path instructions use, and operation . Emphasis is placed on advanced designing, planning, safety, and CNC machine set up, use of advanced tooling and operational manufacturing standards.

CFT 295 Directed Study in Woodworking (1, 2, 3, 4, 5, 6)
48, 96, 144, 192, 240, or 288 hours laboratory
Prerequisite: A minimum grade of 'C' in CFT 105
Transfer acceptability: CSU
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
Office: NS-355B
Associate Degree, Certificate of Achievement and Certificate of Proficiency requirements are listed in Section 6 (green pages).

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: *Pass/No Pass grading only*
Non-degree Applicable
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*
Introductory study of the principles and laboratory techniques of general chemistry. Laboratory must be taken concurrently with lecture.

CHEM 104   General Organic and Biochemistry   (5)
4 hours lecture - 3 hours laboratory
Transfer acceptability: *CSU; UC*
This course will cover the basic principles of general chemistry, organic chemistry and biochemistry as needed to understand the biochemistry, physiology, and pharmacology of the human body. This course is intended mainly for students pursuing health professions.

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*
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 MATH 60*
Corequisite: *CHEM 110L*
Transfer acceptability: *CSU; UC*
C-ID CHEM 110 for CHEM 110 and 110L combined; CHEM 120S for CHEM 110, 110L, 115 and 115L combined
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: *A minimum grade of 'C' in CHEM 110, or concurrent enrollment in CHEM 110*
Transfer acceptability: *CSU; UC*
C-ID CHEM 110 for CHEM 110 and 110L combined; CHEM 120S for CHEM 110, 110L, 115 and 115L combined
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*
C-ID CHEM 120S for CHEM 110, 110L, 115 and 115L combined
A continuation of the general principles of chemistry with emphasis on chemical kinetics, chemical equilibria acids and bases, thermodynamics and electrochemistry. It includes an overview of coordination chemistry and organic chemistry.

CHEM 115L General Chemistry Laboratory   (2)
6 hours laboratory
Prerequisite: *A minimum grade of 'C' in CHEM 110 and 110L; A minimum grade of 'C' in CHEM 115, or current enrollment in CHEM 115*
Transfer acceptability: *CSU; UC*
C-ID CHEM 120S for CHEM 110, 110L, 115 and 115L combined
Qualitative and quantitative investigations designed to accompany CHEM 115.

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 and/or laboratory may be scheduled by the department. Refer to Class Schedule.
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 220   Organic Chemistry   (5)
3 hours lecture - 6 hours laboratory
Prerequisite: *A minimum grade of 'C' in CHEM 115 and CHEM 115L*
Transfer acceptability: *CSU; UC*
Integrated treatment of organic chemistry including electronic and orbital theory with applications to carbon bonding, stereochemistry, resonance theory, and reaction mechanisms of aliphatic compounds. Strong emphasis on organic nomenclature, reactions, preparations, and synthesis of organic compounds in lecture. 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*
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*
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
Office: MD-354

COURSE OFFERINGS

CS 100   **Introduction to Chicano Studies**   **(3)**
3 hours lecture
Transfer acceptability: CSU; UC
This course is an introductory survey of the field of Chicana/o Studies and the factors that influence the Chicano culture. Emphasis is placed on the historical development of the Chicano people including their Mesoamerican roots, cultural identification, political activities, and their contemporary roles and influence in United States culture, society and economy. This course is designed for students majoring in Chicano Studies and/or Social Sciences and all students interested in Chicana/o culture.

CS 101   **United States History from a**
               Chicano Perspective I   **(3)**
3 hours lecture
Note: This course plus CS 102 meets the State requirement in American History and Institutions.
Transfer acceptability: CSU; UC
A survey of early American history from the Mexican/Chicano perspective. Focus is on the period of discovery to Reconstruction with emphasis on the evolution, influence and experience of the Chicano. Chicano contributions are analyzed for political, social, economic and cultural development of the United States. Intended for students interested in history, ethnic studies or other social sciences.

CS 102   **United States History from a**
               Chicano Perspective II   **(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 survey course in American history that covers the period from the American acquisition in 1848 of Mexican territory to the present. Emphasis is placed on the role of the Chicano in the development of the United States throughout the nineteenth and twentieth century. Topics include slavery in the former Mexican territories, the native American experience, immigration patterns and constitutional development and government in California. Intended for students interested in history, ethnic studies, or other social issues.

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 140   **Chicana Thought and Cultural Expression**   **(3)**
3 hours lecture
Transfer acceptability: CSU; UC
This course is the study of the Chicana in America society in historical and sociological perspective. Emphasis is placed on Chicana feminist scholarship and cultural representations, border issues, resistance to patriarchy, and the search for power. This course is designed for all students interested in Chicana and Chicano studies.

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
Office: MD-354
Associate Degree, Certificate of Achievement and Certificate of Proficiency requirements are listed in Section 6 (green pages).
Associate Degrees for transfer IGETC and CSUGE requirements are listed in Section 7 (green pages).
For transfer information, consult a Palomar College counselor at 760-891-7511

COURSE OFFERINGS

CHDV 99   **Preparation for Child Development Majors**   **(0.5)**
½ hour lecture
Prepares Child Development majors to successfully complete child development course work at the 100 level and higher. Introduces the concepts of APA writing and format, Child Development department requirements for observations and lesson plans, skills to develop a professional portfolio, and creating a degree completion plan. It is strongly recommended that students complete this course in the first semester of enrollment in a Child Development program.

CHDV 100   **Child Growth and Development**   **(3)**
3 hours lecture
Transfer acceptability: CSU; UC
C-ID CDEV 100
Introductory course that examines the major physical, psychosocial, and cognitive/language developmental milestones for children, both typical and atypical, from conception through adolescence. There will be an emphasis on interactions between maturational processes and environmental factors. While studying developmental theory and investigative research methodologies, students will observe children, evaluate individual differences and analyze characteristics of development at various stages.

CHDV 101   **Principles and Practices of Teaching Young Children**   **(3)**
3 hours lecture
Transfer acceptability: CSU
C-ID ECE 120
An examination of the underlying theoretical principles of developmentally appropriate practices applied to programs, environments, emphasizing the key role of relationships, constructive adult-child interactions, and teaching strategies in supporting physical, social, creative and intellectual development for all young children. This course includes a review of the historical roots of early childhood programs and the evolution of the professional practices promoting advocacy, ethics, and professional identity.

CHDV 102   **Working with Parents and Families**   **(3)**
3 hours lecture
Transfer acceptability: CSU
Establishes the roles of preschool teachers, child-care providers, and early childhood administrators as effective partners with parents by developing a family-centered approach to parent involvement. Examines cultural and developmental diversity in relation to parent and family interactions and contacts. Develops skills and techniques in familial involvement including: communication, home visits, conferences, parent education, and group contacts with parents.

CHDV 103   Infant and Toddler Development   (3)
3 hours lecture
Transfer acceptability: CSU

A study of the process of human development from pre-conception to 36 months of age, as influenced by heredity, society, and human interaction, with implications for guidance. Physical, cognitive, language, social, and emotional growth and developmental domains are addressed. Prenatal development and the birth process are examined. In addition to typical and atypical developmental milestones in all domains, a focus on attachment and relationships in relation to development is emphasized.

CHDV 104   Guidance for Young Children   (3)
3 hours lecture
Transfer acceptability: CSU/UC

Designed to increase understanding of children's behavior. Designed for parents, early childhood educators and caregivers to explore effective guidance techniques to promote a child's self-control, self-esteem and competence. Developmental, cultural and communication principles are emphasized. Strategies for environmental controls for behavior and pro-social interactions are emphasized and techniques for dealing with issues including separation, peer interaction, fears, frustration and aggression are investigated.

CHDV 105   Observation and Assessment   (3)
3 hours lecture
Prerequisite: A minimum grade of 'C' in CHDV 100
Corequisite: CHDV 105A, 105B, or 105C
Recommended preparation: ENG 100
Transfer acceptability: CSU
C-ID ECE 200

Focuses on the appropriate use of a variety of assessment and observation strategies, such as recording methods, rating systems, portfolios, and multiple assessment tools to document child development and behavior. Child observations will be conducted and analyzed in a variety of age ranges, including infant/toddler, preschool, early elementary and/or in early intervention settings.

**CHDV 105A Observation, Assessment, and Participation
          Lab: Preschool   (1)**
3 hours laboratory
Prerequisite: A minimum grade of 'C' in CHDV 105, or concurrent enrollment in CHDV 105
Transfer acceptability: CSU

Designed to give students direct experience in observing and recording children's behaviors in a preschool or equivalent early childhood setting. Participating and working directly with young children (3 to 5 years) in a preschool classroom or equivalent setting is required. Laboratory experience will be completed at one of the Palomar College ECE Lab Schools on campus or with a department approved California Mentor Teacher.

**CHDV 105B Observation, Assessment, and Participation
          Lab: Infant/Toddler   (1)**
3 hours laboratory
Prerequisite: A minimum grade of 'C' in CHDV 105, or concurrent enrollment in CHDV 105
Transfer acceptability: CSU

Designed to give students direct experience through observing and recording children's behaviors in an infant and/or toddler setting. Participating and working directly with infants and/or toddlers (0 to 3 years) in a classroom is required. Laboratory experience will be completed at one of the Palomar College ECE Lab Schools on campus or with a department approved California Mentor Teacher.

**CHDV 105C Observation, Assessment, and Participation
          Lab: Early Inclusion   (1)**
3 hours laboratory
Prerequisite: A minimum grade of 'C' in CHDV 105, or concurrent enrollment in CHDV 105
Transfer acceptability: CSU

Designed to give students direct experience through observing and recording children's behaviors in an early childhood inclusive setting. Participating and working directly with children with special needs (0 to 5 years) in a classroom is required. Laboratory experience will be completed at one of the Palomar College ECE Lab Schools on campus or with a department approved California Mentor Teacher.

CHDV 106   Infant and Toddler Care and Curriculum   (3)
3 hours lecture
Transfer acceptability: CSU

A survey of program and activity planning for infants and toddlers in child care programs, applying current research and theory and emphasizing the role of the environment on behavior, attachment, and development. Strategies for working with parents, observation and assessment skills and the need for professional development will be explored. Concepts of effective practice for infant and toddler care with an emphasis on communication, cultural differences, problem-solving, and providing an appropriate and nurturing environment for children of all ability levels. Examines essential policies, principles, and practices that lead to quality care and developmentally appropriate curriculum for children birth to 36 months.

**CHDV 108   Developmentally Appropriate Principles
          and Practices   (1)**
1 hour lecture
Transfer acceptability: CSU

Designed to introduce developmentally appropriate practices (DAP) in Early Childhood Education. A focus will be placed on current best practices in curriculum activities, methods, and materials appropriate for planning and evaluating programs for young children. Techniques for incorporating Early Learning Standards into Developmentally Appropriate Curriculum will be explored.

CHDV 110   Introduction to Children with Special Needs   (3)
3 hours lecture
Transfer acceptability: CSU/UC

Introduces the variations in development of children with special needs ages birth through eight and the resulting impact on families. Provides an overview of special education in the United States, including the historical antecedents, legislation, the identification and referral process, as well as discussion of societal, family, and classroom issues relevant to children with special needs. Focus is on fostering understanding and respect for people with differences, their families, and the professionals that serve them. This course does not focus on classroom teaching strategies specifically, rather it is an overview of the special education system in the US.

CHDV 112   Early Intervention and Inclusion   (3)
3 hours lecture
Transfer acceptability: CSU

Covers curriculum and intervention strategies for working in inclusive settings with children with special needs from birth to age 8, in partnership with families. Topics covered will include observation and assessment, curriculum modification and accommodation strategies to facilitate the development of cognitive, motor, social, emotional, and language skills in infants, toddlers, and young children with disabilities. Specific emphasis will be placed on collaborative and culturally competent methods for working with professionals in the field as well as the families of children with special needs.

CHDV 115   Child, Family, and Community   (3)
3 hours lecture
Transfer acceptability: CSU/UC
C-ID CDEV 110
An examination of the developing child in a societal context that focuses on the interrelationships of family, school, and community and emphasizes historical and socio-cultural factors. The processes of socialization and identity development, demonstrating the importance of respectful, reciprocal relationships that support and empower families in a culturally diverse society will be highlighted, focusing on understanding a holistic approach to child development.

CHDV 120   Health, Safety, and Nutrition   (3)
3 hours lecture
Transfer acceptability: CSU
C-ID ECE 220
Introduction to the laws, regulations, standards, policies and procedures, and early childhood curriculum related to child health, safety, and nutrition. The key components that ensure physical health, mental health, and safety for both children and staff will be identified along with the importance of collaboration with families and health professionals. Focus on integrating the concepts into everyday planning and program development.

CHDV 125   Art in Early Childhood   (3)
3 hours lecture
Transfer acceptability: CSU
Methods and processes for developing creativity through art for young children. Students will plan, implement, and evaluate developmentally appropriate art and creative experiences for young children and apply theoretical concepts in a variety of ways. 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 young children, infants through eight years. Students will plan, implement, and evaluate developmentally appropriate math and science experiences for young children and apply theoretical concepts using various methods. An emphasis is placed on developmental and experiential methods.

CHDV 135   Music and Creative Movement in Early Childhood   (3)
3 hours lecture
Transfer acceptability: CSU
Developing creative experiences through music and movement activities for young children birth through age 8. Students will learn effective use of songs, movement, and instruments that enhance the teaching-learning environment. These include developing strategies for facilitating music and movement activities and integrating those activities throughout the curriculum.

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. Overview of typical language development and literacy development from birth through early childhood, including theoretical approaches and developmental issues, as well as techniques for appropriately incorporating literacy into the classroom. Focus is on literacy development, literature and language development for children birth to age 8, although literature for children ages 8-16 is covered.

CHDV 142   Using Sign in the Early Childhood Setting   (.5)
½ hour lecture
Transfer acceptability: CSU
Explores the benefits and research behind signing with infants, toddlers, and preschoolers. Techniques for implementing use of signs in the classroom with children will be discussed, as well as basic signing exercises and games.

CHDV 144   Exploring the Effects of Media on Young Children   (.5)
½ hour lecture
Note: Cross listed as COMM 144
Transfer acceptability: CSU
Explores the effects of media consumption on young children's social-emotional, physical, and cognitive development. Research behind the risks associated with television and computer use and popular culture saturation for young children, as well as benefits to development. Techniques for addressing media consumption with children, parents and families, and methods for effectively using media will be examined.

CHDV 145   Understanding Child Abuse and Family Violence   (3)
3 hours lecture
Transfer acceptability: CSU
Identify, prevent, report, assess, and intervene in cases of child abuse and neglect, domestic violence and community violence. Includes the history of child maltreatment, contemporary laws, mandated reporting, advocacy, and use of community services and agencies that pertain to abuse and neglect. Understanding familial and environmental factors that contribute to child abuse, as well as critical thought about prevention and intervention techniques.

CHDV 150   Administration I:
            Programs in Early Childhood Education   (3)
3 hours lecture
Prerequisite: CHDV 100 and CHDV 115
Recommended preparation: Currently teaching or supervising in a preschool or childcare setting.
Transfer acceptability: CSU
Introduction to the administration of early childhood programs. Covers program types, funding, budget, management, state regulations, laws, development and implementation of policies and procedures. Examines administrative tools, philosophies, and techniques needed to organize, open, and operate an early care and education program. Ethical concerns and professional development will be addressed. Partially fulfills the requirement for administration for the Site Supervisor and Program Director Child Development Permits issued by the State of California Commission on Teaching Credentialing, and also meets Title 22 licensing regulations for directors.

CHDV 152A   Environmental Rating Scale for
            Early Childhood Settings   (1.5)
1½ hours lecture
Transfer acceptability: CSU
An overview of the Environmental Rating Scale for early childhood settings (ECERS). Self-study and assessment methods for quality environments will be explored. Application of the rating scale will be emphasized.

CHDV 152B   Environmental Rating Scale for
            Infant/Toddler Settings   (1.5)
1½ hours lecture
Transfer acceptability: CSU
An overview of the Environmental Rating Scale for infant/toddler settings (ITERS-R). Self-study and assessment methods for quality environments will be explored. Application of the rating scale will be emphasized.

CHDV 152D   Environmental Rating Scale or School Age Care   (1.5)
1½ hours lecture
Transfer acceptability: CSU
An overview of the Environmental Rating Scale for school-age care settings (SACERS). Self-study and assessment methods for quality environments will be explored. Application of the rating scale will be emphasized.

CHDV 155   Administration II: Personnel and
Leadership in Early Childhood Education   (3)
3 hours lecture
Prerequisite: CHDV 100 and CHDV 115
Recommended preparation: Currently teaching or supervising in a preschool or childcare setting.
Transfer acceptability: CSU
Effective strategies for personnel management and leadership in early care and education settings. Includes legal and ethical responsibilities, supervision techniques, professional development, and reflective practices for a diverse and inclusive early care and education program. Application of supervisory techniques that generate productive staff supervision in early childhood settings, including staff motivation, staff benefits, team building, and leadership skills. Partially fulfills the requirement for administration for the Site Supervisor and Program Director Child Development Permits issued by the State of California Commission on Teacher Credentialing, and also meets Title 22 licensing regulations for directors.

CHDV 172   Teaching in a Diverse Society   (3)
3 hours lecture
Transfer acceptability: CSU/UC
C-ID ECE 230
Examines the development of social identities in diverse societies including theoretical and practical implications affecting young children, families, programs, teaching, education and schooling. Culturally relevant and linguistically appropriate anti-bias approaches supporting all children in becoming competent members of a diverse society. Social and emotional learning and conflict resolution is explored as a part of this process. Involves self-reflection of one's own understanding of educational principles in integrating bias in order to better inform teaching practices and/or program development. Examines issues of diversity in areas including, but not limited to: race, ethnicity, gender, ability, family structure, sexuality, and religion.

CHDV 174   Policies, Politics, and Ethics in Child Development   (1)
1 hour lecture
Transfer acceptability: CSU
This course provides an overview of professional standards in the child development field. Policies and ethics for working with children, families, and communities are explored in view of changing political times and how professionals are affected and influenced by these changes. The course overviews the steps needed to become effective advocates on behalf of children and families.

CHDV 180   School-Age Development   (3)
3 hours lecture
Transfer acceptability: CSU
Designed to prepare students to work in educational and childcare settings, by focusing on the development of children ages 5 through 12. Students will study developmental theories and the practical implications of these theories when working with the school-aged child.

CHDV 182   ECE Curriculum Experiences:
Art, Music and Movement   (3)
3 hours lecture
Transfer acceptability: CSU
Examine art, music and movement concepts for young children, infants through eight years. Plan, implement, and evaluate developmentally appropriate creative experiences in art, music, movement and dramatic play and will apply theoretical concepts using various methods. Emphasis will be placed on the developmental, integrative, theoretical and experiential approaches and techniques to facilitate creative experiences in art, movement and music in early childhood curriculum for application in the early childhood setting.

CHDV 184   ECE Curriculum Experiences:
Language, Literacy, Math and Science   (3)
3 hours lecture
Transfer acceptability: CSU
Examine language development, literature, logic, math and science concepts for young children, infants through eight years. Plan, implement, and evaluate developmentally appropriate literature, math and science experiences for young children and apply theoretical concepts using various methods. Overview is presented of typical language and literacy development from birth through early childhood, including theoretical approaches and developmental issues, as well as techniques for appropriately incorporating literacy, math and science across curricula. An emphasis is placed on developmental and experiential methods for application in the early childhood education setting.

CHDV 185   Introduction to Curriculum   (3)
3 hours lecture
Recommended preparation: A minimum of 12 Child Development units
Transfer acceptability: CSU
C-ID ECE 130
Presents an overview of knowledge and skills related to providing appropriate curriculum and environments for young children from birth to age 6. Students will examine a teacher's role in supporting development and engagement for all young children. Provides strategies for developmentally-appropriate practice based on observation and assessments across the curriculum, including pedagogical philosophies, curricular content areas, play and creativity, guidance, and development of social-emotional, communication, and cognitive skills.

CHDV 190   Curriculum for the School-Age Child   (3)
3 hours lecture
Transfer acceptability: CSU
A survey of programs and activity planning for school-age children (5-12), including both before and after school curriculum and activities for groups and individuals of various developmental levels in the school-age range. This course incorporates licensing regulations for Title 22 and Title 5 licensed facilities.

CHDV 195   Adult Supervision and Mentoring in
Early Care and Education   (3)
3 hours lecture
Prerequisite: A minimum grade of 'C' in CHDV 100, and 115, completion of, or concurrent enrollment in CHDV 152A or CHDV 152B
Recommended Preparation: Currently teaching in a preschool or child care setting in the role of lead teacher, head teacher, or other supervisory capacity.
Transfer acceptability: CSU
Methods and principles of supervising student teachers, volunteers, staff, and other adults in early care and education settings. Emphasis is on the roles and development of early childhood professionals as mentors and leaders. The role of the experienced classroom teacher who functions as a mentor to new teachers while simultaneously addressing the needs of children, parents, staff, and community resources will be emphasized. Students study effective models for guidance and evaluation of adults, positive communication skills, and the role of the mentor in a teaching environment. This course is designed for students who plan to supervise other adults in the early childhood classroom. This course is required for the levels of Master Teacher, Site Supervisor, and Program Director for the Child Development Permit issued by the State of California Commission on Teacher Credentialing.

CHDV 197A Child Development Workshop:
Cultural and Social Arts   (.5 - 4)
Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture or laboratory may be scheduled by the department. Refer to Class Schedule.
Note: *Pass/No Pass grading*
Transfer acceptability: CSU
Workshop to provide updates in knowledge and skills related to cultural arts for use in child development applications. Topics could include, but are not limited to, curriculum, materials and environments, and play. May include current and historical information related to cultural arts in relation to 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 or laboratory may be scheduled by the department. Refer to Class Schedule.
Note: Pass/No Pass grading
Transfer acceptability: CSU
Workshop will provide current knowledge and skills in topics related to the health, safety, and/or nutrition of young children. Topics may include, but are not limited to: infant, child, and adolescent health, safety, and/or nutrition; food service; communicable disease transmission and prevention; pediatric CPR and first aid; injury control; outdoor environments; physical fitness; childhood obesity; child mental health and social and behavioral wellness. May include speakers, seminars, and in service training in current aspects of child development.

CHDV 197C   Child Development Workshop: Professional
Development in Early Childhood Education   (.5 - 4)
Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture or laboratory may be scheduled by the department. Refer to Class Schedule.
Note: Pass/No Pass grading
Transfer acceptability: CSU
Workshop will provide current knowledge and skills related to professional education for early childhood educators and administrators, which includes speakers, seminars, and in service training in current aspects of child development.

CHDV 197D   Child Development Workshop:
Parenting Topics   (.5 - 4)
Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture or laboratory may be scheduled by the department. Refer to Class Schedule.
Note: Pass/No Pass grading
Transfer acceptability: CSU
Workshop to provide skills and education in parenting. Topics may include, but are not limited to: family development and structure, communication and problem solving, co-parenting, divorce, rhythm and routines, guidance, and/ or parenting styles. Upon approval, workshops in this area may satisfy court-mandated parenting requirements.

CHDV 201   Practicum in Early Childhood Education   (4)
3 hours lecture - 3 hours laboratory
Prerequisite: A minimum grade of 'C' in CHDV 105 and CHDV 115, completion of or concurrent enrollment in CHDV 185
Note: Students taking CHDV 201 should be in the last year of their Child Development program.
Transfer acceptability: CSU
C-ID ECE 210
Students will practice and demonstrate developmentally appropriate early childhood program planning and teaching competencies under the supervision of Palomar College ECE Lab School or a designated site with a mentor teacher approved by the California Early Childhood Mentor Program, upon placement by the Child Development department. Students will utilize practical classroom experiences to make connections between theory and practice, develop professional behaviors, and build a comprehensive understanding of children and families. Child centered, play-oriented approaches to teaching, learning, and assessment; and knowledge of curriculum content areas will be emphasized as student teachers design, implement and evaluate experiences that promote positive development and learning for all young children.

CHDV 202   Advanced Practicum in Early Childhood
Education: Preschool   (1.5)
½ hour lecture - 3 hours laboratory
Prerequisite: Completion of CHDV 201 and a minimum grade of 'C' or concurrent enrollment in CHDV 99, CHDV 104, CHDV 105A, CHDV 120, CHDV 152A, CHDV 142, CHDV 101, CHDV 195, CHDV 182, CHDV 184, CHDV 145
Transfer acceptability: CSU
Building on skills developed in CHDV 201, students will be further prepared to teach in various types of preschool programs, with children 3-5 years old. Students will create and implement developmentally appropriate lesson plans, curriculum planning, instructional methods, observational methods, guidance techniques, and activities for young children in a supervised preschool/ early childhood teaching experience at Palomar College ECE Lab School, at a designated site with a mentor teacher approved by the California Early Childhood Mentor Program, or at the student's worksite serving children 3-5 years old.

CHDV 203   Advanced Practicum in Early Childhood
Education: Infant/Toddler   (1.5)
½ hour lecture - 3 hours laboratory
Prerequisite: Completion of CHDV 201 and a minimum grade of 'C' or concurrent enrollment in CHDV 99 , CHDV 103 , CHDV 104 , CHDV 105B , CHDV 106 , CHDV 120 , CHDV 142 , CHDV 152B , CHDV 182, CHDV 184, CHDV 195
Transfer acceptability: CSU
Building on skills developed in CHDV 201, students will be further prepared to teach in various types of infant/toddler programs with children 0-36 months old. Students will create and implement developmentally appropriate lesson plans, curriculum planning, instructional methods, observational methods, guidance techniques, and activities for young children in a supervised infant/toddler early childhood teaching experience at Palomar College ECE Lab School, at a designated site with a mentor teacher approved by the California Early Childhood Mentor Program, or at the student's worksite serving children 0-36 months old.

CHDV 204   Advanced Practicum in Early Childhood
Education: Inclusive Setting   (1.5)
½ hour lecture - 3 hours laboratory
Prerequisite: Completion of CHDV 201 and a minimum grade of 'C' or concurrent enrollment in CHDV 99, CHDV 104, CHDV 105C, CHDV 110, CHDV 112, CHDV 120, CHDV 152A, CHDV 152B, CHDV 106, CHDV 142, CHDV 182, CHDV 184, CHDV 195
Transfer acceptability: CSU
Building on skills developed in CHDV 201, students will be further prepared to teach in various types of inclusive early childhood programs. Students will create and implement developmentally appropriate lesson plans, curriculum planning, instructional methods, observational methods, guidance techniques, and activities for young children with identified needs in a supervised inclusive early childhood teaching experience at Palomar College ECE Lab School, at a designated site with a mentor teacher approved by the California Early Childhood Mentor Program, or at the student's worksite serving children in an inclusive setting.

CHDV 205   Internship in Child and Family Services   (2)
2 hours lecture
Prerequisite: A minimum grade of 'C' in CHDV 100, and 115
Corequisite: CHDV 205A
Transfer acceptability: CSU
Students will practice and demonstrate the theories and techniques of their discipline in an internship position in a professional setting under the instruction of a faculty member and an internship supervisor. Students will make connections between theory and practice, develop professional behaviors and increase their understanding of children and families. This course introduces the students to aspects of the roles and responsibilities of professional employment in the field of study. Course topics include goal setting, employability skills development, and examination of the world of work as it relates to the student's career plans in child and family services. Students will work with agencies that serve families with children under the age of 18. Students may not be financially reimbursed for this internship experience.

CHDV 205A Internship in Child and Family Services Lab **(1)**
3¾ hours laboratory
Prerequisite: *A minimum grade of 'C' in CHDV 100, CHDV 115 and CHDV 105*
Corequisite *CHDV 205*
Transfer acceptability: *CSU*
Students learn child development 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. Course is repeatable not to exceed a total of 16 units.

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*
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 World Languages Department for further information.
760-744-1150, ext. 2390
Office: H-201

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*
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 102   Chinese II **(5)**
5 hours lecture - 1 hour laboratory
Prerequisite: *A minimum grade of 'C' in CHIN 101 or two years of high school Chinese*
Transfer acceptability: *CSU; UC*
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 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 and/or laboratory may be scheduled by the department. Refer to Class Schedule.
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 - 1 hour laboratory
Prerequisite: *A minimum grade of 'C' in CHIN 102 or three years of high school Mandarin Chinese*
Transfer acceptability: *CSU; UC*
This course is the third semester of Mandarin 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. Course combines in-class instruction with self-paced study in the World Languages Laboratory. Class is largely conducted in Chinese.

Cinema (CINE)

See also Digital Broadcast Arts and Journalism

Contact the Media Studies Department for further information.
760-744-1150, ext. 2440
Office: P-31
Associate Degree, Certificate of Achievement and Certificate of Proficiency requirements are listed in Section 6 (green pages).
For transfer information, consult a Palomar College Counselor.

COURSE OFFERINGS

CINE 100   Art of the Cinema **(3)**
3 hours lecture
Transfer acceptability: *CSU; UC*
This course is an aesthetic study of film. It examines the broad questions of form and content, aesthetics and meaning, and history and culture. Weekly film screenings will investigate the use of symbolism, characterization, imagery, and uses of realism and fantasy in motion pictures. Analysis of significant films will be in terms of thematic coherence, structural unity, technical achievement, and visual beauty. Topics include modes of production, narrative and non-narrative forms, visual design, editing, sound, genre, ideology and critical analysis. Also explored is how the film business influences cinema as an art form.

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
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   Documentary Film   (3)
3 hours lecture
Transfer acceptability: CSU
A study of the complete spectrum of documentary film including actualities, travel records, political propaganda, newsreels, historical, ethnographic, and archival films and those that make a personal poetic statement. The contributions of important filmmakers including Ken Burns, Robert Flaherty, John Grierson, Barbara Kopple, Ricky Leacock, Albert and David Maysles, Michael Moore, D.A. Pennebaker, and Frederick Wiseman will be discussed. Significant films from the beginning of film to the present will be screened.

CINE 115   Creative Writing for Television and Cinema   (3)
3 hours lecture
Note: Cross listed as DBA 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
Film criticism refers to the serious and detailed analysis of film. Several critical approaches, i.e. auteur, genre, realism, feminism, will be studied and used to analyze film. These approaches explore film and its meaning through the historical development of the medium, from filmmaking's technical components, by relating a film or group of films to the social and cultural environment of the time, by focusing on the work in terms of its emotional and psychological impact on the viewer and how it is influenced by the nature of the film industry and financial considerations. We will recognize the collaborative nature of the medium as well as the significance of the individual artist to a particular film or group of films. Films will be screened weekly in class.

CINE 122   Identity in American Film   (3)
3 hours lecture
Transfer acceptability: CSU; UC
A critical study of how American identity is formed in relation to American cinema. Areas of investigation include race, class, gender, sexual orientation, age, and ethnicity. Screening and analysis of films will be undertaken to investigate how select films reflect, celebrate, modify, and criticize mainstream American values. Off campus programs may be required.

CINE 123   Queer Cinema   (3)
3 hours lecture
Transfer acceptability: CSU; UC
A study of how historical and cultural conditions have shaped cinema's depictions of gay men, lesbians, bisexuals, and the transgendered, and how these "queer" subjects and communities have responded through viewing practices and alternative film and video production.

CINE 125   Beginning Single Camera Film and Video Production   (3)
1½ hours lecture - 4½ hours laboratory
Recommended preparation: CINE 100 or DBA 100L
Note: Cross listed as DBA 125
Transfer acceptability: CSU; UC – CINE/DBA 125 and 225 combined: maximum credit, one course
This course provides an introduction to the theory, terminology, and operation of single camera film and video production as it applies to narrative storytelling for film and television. Areas of study include basic elements of screenwriting and production design, cinematography including camera operation, digital video and audio recording and basic editing techniques. It focuses on the aesthetics and fundamentals of scripting, producing, directing on location, postproduction and exhibition/distribution. Students may shoot on Super 8mm, 16mm film or digital video.

CINE 170   Introduction to Video Editing   (3)
1½ hours lecture - 4½ hours laboratory
Note: Cross listed as DBA 170; may not be taken for Pass/No Pass grading
Transfer acceptability: CSU
Covers the technical and theoretical aspects of film and video editing. Provides an introduction to the basic techniques, elements of editing language, the various technical processes used, introduction to Final Cut Pro software, as well as the related skills necessary for editing digital media.

CINE 225   Intermediate Single Camera Film and Video Production   (3)
1½ hours lecture - 4½ hours laboratory
Prerequisite: A minimum grade of 'C' in CINE/DBA 125
Note: Cross listed as DBA 225
Transfer acceptability: CSU; UC – CINE/DBA 125 and 225 combined: maximum credit, one course
This course goes beyond the basics to provide a more extensive study of the theory, terminology, and operation of single camera film and video production as it applies to narrative and documentary film and television. Topics include basic cinematography including the operation, function and creative uses of production and post-production equipment, scriptwriting, camera operation, shot composition, lighting, sound recording and mixing, and editing. Students may shoot on Super 8mm, 16mm film or digital video.

CINE 270   Digital Video Editing   (3)
1½ hours lecture - 4½ hours laboratory
Note: Cross listed as DBA 270
Note: May not be taken for Pass/No Pass grading
Transfer acceptability: CSU
Principles and techniques of digital non-linear video editing for broadcast TV and film. Overview of Adobe Premiere software program. Application of professional operational and aesthetic editing principles.

CINE 275   Avid Editing for Television and Film   (3)
1½ hours lecture - 4½ hours laboratory
Prerequisite: A minimum grade of 'C' in DBA 270
Note: Cross listed as DBA 275
Note: May not be taken for Pass/No Pass grading
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.

Communications (COMM)
See also Cinema, Digital Broadcast Arts, and Journalism

Contact the Media Studies Department for further information.
760-744-1150, ext. 2440
Office: P-31
Associate Degree, Certificate of Achievement and Certificate of Proficiency requirements are listed in Section 6 (green pages).
For transfer information, consult a Palomar College Counselor.

COURSE OFFERINGS

COMM 100   Introduction to Mass Communication   (3)
3 hours lecture
Transfer acceptability: CSU; UC – COMM 100 and 105 combined: maximum credit, one course
C-ID JOUR 100
A multi media approach to a comparative survey of communication in studying the history, structure, economic and social impact of television, cinema, radio, journalism, Internet and new forms of communication.

COMM 104   Introduction to Public Relations   (3)
3 hours lecture
Transfer acceptability: *CSU*
C-ID JOUR 150
A survey of public relations history, theories, and practices with emphasis on applications to business, public agencies and institutions. A practical approach to using the media, creating press releases, organizing and executing campaigns, and promoting favorable relations with various segments of the public.

COMM 105   Race, Gender and Media Effects   (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.

COMM 144   Exploring the Effects of Media on Young Children   (.5)
½ hour lecture
Note: *Cross listed as CHDV 144*
Transfer acceptability: *CSU*
Explores the effects of media consumption on young children's social-emotional, physical, and cognitive development. Research behind the risks associated with television and computer use and popular culture saturation for young children, as well as benefits to development. Techniques for addressing media consumption with children, parents and families, and methods for effectively using media will be examined.

COMM 204   Public Relations Writing and Media Strategies   (3)
3 hours lecture
Transfer acceptability: *CSU*
This course provides students with communication skills required to work as public relations professionals. The course teaches students to write strategically and effectively using a variety of public relations tactics.

Computer Science and Information Technology - Computer Science (CSCI)

See also CSIT - Information Technology,
CSNT - Networking, and CSWB - Web Technology

Contact the Computer Science and Information Technology Department for further information.
760-744-1150, ext. 2387
Office: MD-275
http://www.palomar.edu/csit
Associate Degree, Certificate of Achievement and Certificate of Proficiency requirements are listed in Section 6 (green pages).

COURSE OFFERINGS

CSCI 112   Programming Fundamentals I   (4)
3½ hours lecture - 1½ hours laboratory
Transfer acceptability: *CSU; UC*
C-ID COMP 122
Introduction to the basic concepts of Computer Science, the fundamental techniques for problem solving, and the software development process. Includes the syntax and semantics of the C programming language focusing on basic control structures, data types, and input/output.

CSCI 114   Programming Fundamentals II   (4)
3½ hours lecture - 1½ hours laboratory
Prerequisite: *A minimum grade of "C" in CSCI 112*
Transfer acceptability: *CSU; UC*
Object-oriented programming in Java, focusing on classes, instances, methods, interfaces, encapsulation, overloading, file I/O, inheritance, polymorphism, and exception handling.

CSCI 130   Linux Fundamentals   (3)
2 hours lecture - 3 hours laboratory
Transfer acceptability: *CSU*
An introduction to fundamental end-user skills and tools in Linux, designed for students with little or no command-line Linux or UNIX experience. Emphasis on command line to run shell tools, and to automate routine functions.

CSCI 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.

CSCI 160   Overview of the Video Game Industry   (4)
4 hours lecture
Transfer acceptability: *CSU*
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.

CSCI 161   Video Game Design   (4)
4 hours lecture
Transfer acceptability: *CSU*
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.

CSCI 197   Topics in Computer Science   (.5 - 4)
Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture and/or laboratory may be scheduled by the department. Refer to Class Schedule.
Transfer acceptability: *CSU; UC - Credit determined by UC upon review of course syllabus.*
Topics in Computer Science. See class schedule for specific topic offered. Course title will designate subject covered.

CSCI 210   Data Structures   (4)
3½ hours lecture - 1½ hours laboratory
Prerequisite: *A minimum grade of 'C' in CSCI 114*
Transfer acceptability: *CSU; UC*
C-ID COMP 132
A systematic study of data structures, including arrays, stacks, recursion, queues, linear and non-linear linked lists, binary trees, hashing, comparative study of searching and sorting algorithms, graphs, Huffman codes, introductory analysis of algorithms, introduction to the complexity of algorithms including big "O" notation, time and space requirements, and object-oriented design of abstract data types. Focus on object-oriented programming and its principles of objects, classes, encapsulation, inheritance and its relationship to the Java programming language. Includes hands-on laboratory experience reinforcing the lecture material.

CSCI 212   Machine Organization and Assembly Language   (4)
3½ hours lecture - 1½ hours laboratory
Prerequisite: *A minimum grade of 'C' in CSCI 114*
Transfer acceptability: *CSU; UC*
C-ID COMP 142
An introduction to Assembly 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. Also includes 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.

CSCI 222   C++ and Object Oriented Programming   (4)
3½ hours lecture - 1½ hours laboratory
Prerequisite: *A minimum grade of 'C' in CSCI 114*
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.

CSCI 230   Java GUI Programming   (3)
2 hours lecture - 3 hours laboratory
Prerequisite: *A minimum grade of 'C' in CSCI 114*
Transfer acceptability: *CSU*
Graphical User Interface programming using Java. Emphasizing event-driven programming and the code to create GUI components such as buttons, text area, scrollable views. Includes hands-on laboratory experience reinforcing the lecture material.

CSCI 235   Android Development   (3)
2 hours lecture - 3 hours laboratory
Prerequisite: *A minimum grade of 'C' in CSCI 114*
Transfer acceptability: *CSU*
Applied Java programming to mobile Android phones utilizing the Android Software Development Kit (SDK). Assignments and programs will specifically address the basic aspects of developing applications using the Android SDK.

CSCI 250   Introduction to Artificial Intelligence   (4)
3½ hours lecture - 1½ hours laboratory
Prerequisite: *A minimum grade of 'C' in CSCI 114*
Transfer acceptability: *CSU*
A hands-on introduction to Artificial Intelligence. Topics include: AI history & applications, neural networks, supervised & unsupervised learning, machine learning programming frameworks, computer vision, text and sequences, AI enabling technologies and limits. The course includes hands-on exercises and projects, in which students will learn how to apply common Artificial Intelligence and Machine Learning algorithms to real world problems in fields of computer vision and natural language understanding.

CSCI 260   Video Game Programming I   (3)
2 hours lecture - 3 hours laboratory
Prerequisite: *A minimum grade of 'C' in CSCI 222*
Transfer acceptability: *CSU*
Introduction to the programming of video games. Course will explore 3D game development with the current version of DirectX. Students learn how to create 3D games as well as the basics of designing and using a 3D engine. Includes hands-on laboratory experience reinforcing the lecture, text, and course materials.

CSCI 275   iOS Development   (3)
2 hours lecture - 3 hours laboratory
Prerequisite: *A minimum grade of 'C' in CSCI 114*
Transfer acceptability: *CSU*
Focus on the Swift programming language and the tools and APIs required to build applications for the iOS platform. Includes user interface designs for iOS mobile devices and unique user interactions using multitouch technologies.

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

Computer Science and Information Technology - Information Technology (CSIT)

See also CSCI - Computer Science
CSNT - Networking, and CSWB - Web Technology

Contact the Computer Science and Information Technology Department for further information.
760-744-1150, ext. 2387
Office: MD-275
http://www.palomar.edu/csit
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COURSE OFFERINGS

CSIT 105   Computer Concepts and Applications   (3)
2 hours lecture - 3 hours laboratory
Transfer acceptability: *CSU; UC – no credit if taken after CSCI 108 or 110*
C-ID ITIS 120
The study of computer concepts and basic proficiency in modern application software. Computer concepts will focus on basic terminology; computer literacy; information 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 and e-mail. The Microsoft Office Suite will be taught using Word, Excel, Access and PowerPoint.

CSIT 125   Computer Information Systems   (3)
2 hours lecture - 3 hours laboratory
Recommended Preparation: *CSIT 105*
Transfer acceptability: *UC/CSU*
C-ID ITIS 120
Examination of information systems and their role in business. Focus on information systems, database management systems, networking, e-commerce, ethics and security, computer systems hardware and software components. Application of these concepts and methods through hands-on projects developing computer-based solutions to business problems.

CSIT 145   Introduction to Programming Using Java   (3)
2 hours lecture - 3 hours laboratory
Transfer acceptability: *CSU*
C-ID ITIS 130
An introduction to the fundamental concepts and models of application development including the basic concepts of program design, data structures, programming, problem solving, logic, and fundamental design techniques for event-driven programs. Hands-on experience with a modern application programming language and development platform.

CSIT 150   Introduction to SQL   (3)
2 hours lecture - 3 hours 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.

CSIT 160   Oracle Database Management Systems   (3)
2½ hours lecture - 1½ hours laboratory
Transfer acceptability: *CSU*
An introduction to relational database concepts including the design and creation of database structures using the Oracle Database Management System to store, retrieve, update and display data. Additionally, database management theories and ideas are covered using the Oracle Database Management System.

CSIT 165 R Programming **(3)**
2 hours lecture - 3 hours laboratory
Transfer acceptability: CSU
Introduction to the R programming language. R is becoming the leading programming language and environment to assist data analyst, statisticians, and researchers develop statistical computing and graphics programs.

CSIT 170 Visual Basic I **(3)**
2 hours lecture - 3 hours laboratory
Transfer acceptability: CSU
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.

CSIT 175 Python Programming **(3)**
2 hours lecture - 3 hours laboratory
Transfer acceptability: CSU; UC
Provides the knowledge and skills necessary to use the Python programming language to develop software for Desktop and Web applications Topics of study include the fundamentals of the language, using lists, dictionaries and creating functions and classes.

CSIT 180 C# Programming I **(3)**
2½ hours lecture - 1½ hours laboratory
Transfer acceptability: CSU; UC
Provides the knowledge and skills necessary to use the C# programming language. Emphasis will be placed on application design, problem solving, logic, and programming for GUI and command driven programs. Focus will be on program development techniques and processes of the software development life cycle utilizing the C# programming language.

CSIT 225 Introduction to Data Analytics **(3)**
2 hours lecture - 3 hours laboratory
Transfer acceptability: CSU
An introduction to the fundamental concepts of Business Intelligence (BI) and Data Analytics. BI and Data Analytics are utilized to turn big data into useful information to enable educators, researchers, industry, and businesses to make better decisions. Examine the tools, applications, and processes including Analytics, Understanding Data, Data Warehousing, Big Data, Hadoop, Cloud Computing, and Data Visualization.

CSIT 226 Data Visualization **(3)**
2 hours lecture - 3 hours laboratory
Transfer acceptability: CSU
Provides knowledge and skills necessary to develop analytics in Dashboards and Data Visualization technology. Tableau software will be utilized to implement the graphical Dashboards and Data Visualization.

CSIT 230 Data Modeling **(3)**
2 hours lecture - 3 hours laboratory
Recommended Preparation: CSIT 125
Transfer acceptability: CSU
A systematic study of data modeling to assist data scientist, educators, researchers to unlock the skills of computational intelligence. Development in Excel along with current programming tools such as Visual Basic, Power BI, Power Pivot and DAX will be utilized.

CSIT 280 C# Programming II **(3)**
2½ hours lecture - 1½ hours laboratory
Prerequisite: A minimum grade of 'C' in CSIT 180
Transfer acceptability: CSU; UC
Provides intermediate-level knowledge and skills necessary to use the C# programming language. Topics include language syntax, data types, operators, exception handling, casting, string handling, data structures, collection classes and delegates. Programming of windows-based applications is presented along with object-oriented programming that includes classes, methods, polymorphism and inheritance. Event-driven programming is discussed along with the C# development and execution environment.

CSIT 295 Directed Study in Information Technology **(1, 2, 3)**
3, 6, or 9 hours laboratory
Prerequisite: Approval of project or research by department chairperson/director
Transfer acceptability: CSU; UC - Credit determined by UC upon review of course syllabus.
Designed for the student who has demonstrated a proficiency in Information Technology subjects and the initiative to work independently on a particular sustained project which does not fit into the context of regularly scheduled classes.

Computer Science and Information Technology - Networking (CSNT)

See also CSCI - Computer Science

CSIT - Information Technology, and CSWB - Web Technology

Contact the Computer Science and Information Systems Department for further information.
760-744-1150, ext. 2387
Office: MD-275
http://www.palomar.edu/csit
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COURSE OFFERINGS

CSNT 110 Hardware and O.S. Fundamentals **(4)**
3½ hours lecture - 1½ hours laboratory
Transfer acceptability: CSU
Provides the knowledge and skills necessary to build a foundation in computer hardware and operating systems. Includes 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. Maps to Comptia A+ Industry Exam.

CSNT 111 Networking Fundamentals **(3)**
2 hours lecture - 3 hours laboratory
Transfer acceptability: CSU
Provides the knowledge and skills necessary to build a solid foundation in computer networking. Includes 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.

CSNT 120 Windows Client and Microsoft Office Deployment **(3)**
2½ hours lecture - 2 hours laboratory
Prerequisite: A minimum grade of 'C' in CSNT 110 and 111
Transfer acceptability: CSU
Provides the knowledge and skills necessary to install and configure Microsoft Windows Client (current version) on stand-alone computers and on client computers that are part of a network. Provides the knowledge and skills to deploy Microsoft Office.

CSNT 121 Windows Server **(3)**
2½ hours lecture - 2 hours laboratory
Prerequisite: A minimum grade of 'C' in CSNT 111
Transfer acceptability: CSU
Provides the knowledge and skills necessary to install, configure, and administer a Microsoft Windows Server (current version) 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.

CSNT 122　Windows Systems Administration　(3)
2 hours lecture - 3 hours laboratory
Prerequisite: *A minimum grade of 'C' in CSNT 111. Completion of, or concurrent enrollment in CSNT 110*
Transfer acceptability: *CSU*
Provides the knowledge and skills required to build, maintain, troubleshoot, and support server hardware and software technologies. Students will Identify environmental issues; understand and comply with disaster recovery and physical/software security procedures; become familiar with industry terminology and concepts; understand server roles/specializations and interaction within the overall computing environment.

**CSNT 124　Implementing a Microsoft Desktop
　　　　　　Application Environment　(3)**
2 hours lecture - 3 hours laboratory
Prerequisite: *A minimum grade of 'C' in CSNT 121. Completion of, or concurrent enrollment in CSNT 121*
Transfer acceptability: *CSU*
Provides the knowledge and skills necessary to design and prepare the desktop application environment. Design and implement a presentation virtualization environment, design and implement an application virtualization environment, deploy and manage the application environment, and design business continuity for the desktop and application environment.

CSNT 140　Linux Administration　(3)
2 hours lecture - 3 hours laboratory
Prerequisite: *A minimum grade of 'C' in CSCI 130*
Transfer acceptability: *CSU*
For users of Linux (or UNIX) who want to start building skills in systems administration to a level where they can attach and configure a workstation on an existing network.

CSNT 141　Linux Networking and Security　(3)
2 hours lecture - 3 hours laboratory
Prerequisite: *A minimum grade of 'C' in CSNT 140*
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.

CSNT 160　Cisco Networking Fundamentals　(3)
2½ hours lecture - 2 hours laboratory
Prerequisite: *A minimum grade of 'C' in CSNT 110*
Recommended preparation: *CSNT 111*
Transfer acceptability: *CSU*
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.

CSNT 161　Cisco Router Configuration　(3)
2½ hours lecture - 2 hours laboratory
Prerequisite: *A minimum grade of 'C' in CSNT 160*
Transfer acceptability: *CSU*
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.

CSNT 180　Wireless Networking　(3)
2½ hours lecture - 2 hours laboratory
Prerequisite: *A minimum grade of 'C' in CSNT 110, and CSNT 111 or CSNT 160*
Transfer acceptability: *CSU*
Provides a hands-on guide to planning, designing, installing and configuring wireless LANs that prepares students for the Certified Wireless Network Administrator (CWNA) certification. In-depth coverage of wireless networks with extensive step-by-step coverage of IEEE 802.11 b/a/g/pre-n implementation, design, security, and troubleshooting. Material is reinforced with hands-on projects at the end of each chapter from two of the principal wireless LAN vendors, Cisco and Linksys.

CSNT 181　Hacker Prevention/Security　(3)
2½ hours lecture - 2 hours laboratory
Prerequisite: *A minimum grade of 'C' in CSNT 110, and CSNT 111 or CSNT 160*
Transfer acceptability: *CSU*
In-depth analysis and hands-on experience in PC and network security concepts specific to Microsoft, Unix-based and Cisco systems. Various topics including hacker prevention and intrusion detection, firewall installation and configuration, wireless network security, disaster recovery, access control lists, identification of malicious code, cryptography and forensics. Team dynamics in a lab environment, planning, installing, and configuring various network security elements regarding hardware, software, and media. Understand and demonstrate proper planning and implementation of a secure network, document and offer training to end- users, executives, and human resources on the proper maintenance of a secure network.

CSNT 250　Cyber Defense and Analysis　(3)
2 hours lecture - 3 hours laboratory
Recommended Preparation: *CSNT 181*
Transfer acceptability: *CSU*
Evaluation of cyber security team functions as it pertains to the analysis of organizational defensive measures, threat management and incident response. Topics covered include threat reconnaissance, securing a corporate network, vulnerability management, identity management and secure software coding. Students will learn the process of securing a corporate network, identifying vulnerabilities that can be exploited and responding to a cyber security incident.

CSNT 255　Ethical Hacking Principles　(3)
2 hours lecture – 3 hours laboratory
Recommended Preparation: *A minimum grade of 'C' in CSNT 181*
Transfer acceptability: *CSU*
In-depth analysis and hands-on practical experience in computer and network security concepts from an ethical hacking perspective. Various topics include penetration testing methodology, mobile platform attacks, and cloud computing defenses. Students will be taught the five phases of ethical hacking, which include reconnaissance; gaining access; account enumeration; maintaining access; and covering your tracks. Students will learn how to assess the security posture of an organization and use the same techniques malicious hackers use to identify vulnerabilities and remediate problems before a successful attack is perpetrated. Technical knowledge and critical thinking skills will be developed to explore the challenges and legal issues of cyber security testing.

CSNT 260　Cisco Advanced Routing and Switching　(3)
2½ hours lecture - 2 hours laboratory
Prerequisite: *A minimum grade of 'C' in CSNT 161*
Transfer acceptability: *CSU*
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.

CSNT 261　Cisco Wide Area Network Design and Support　(3)
2½ hours lecture - 2 hours laboratory
Prerequisite: *A minimum grade of 'C' in CSNT 260*
Transfer acceptability: *CSU*
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.

CSNT 280　Computer Forensics Fundamentals　(3)
2 hours lecture - 3 hours laboratory
Transfer acceptability: *CSU*
Introduces methods used to properly conduct a computer forensics investigation beginning with a discussion of ethics, while mapping to the objectives of the International Association of Computer Investigative Specialists (IACIS) certification. Topics covered include an overview of computer forensics as a profession; the computer investigation process; understanding operating systems boot processes and disk structures; data acquisition and analysis; technical writing; and a review of familiar computer forensics tools.

Computer Science and Information Technology - Web Technology (CSWB)

See also CSCI - Computer Science

CSIT - Information Technology, and CSNT - Networking

Contact the Computer Science and Information Systems Department for further information.
760-744-1150, ext. 2387
Office: MD-275
http://www.palomar.edu/csit
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COURSE OFFERINGS

CSWB 110   Web Site Development with HTML5/CSS3   (3)
2 hours lecture - 3 hours laboratory
Recommended preparation: CSIT 105
Transfer acceptability: CSU
A foundation course for Internet/Intranet technologies. Skills required to develop and publish web sites utilizing HTML, including using HTML tables, web page forms, and basic CSS (Cascading Style Sheets).

CSWB 120   JavaScript and jQuery   (3)
2½ hours lecture - 1½ hours laboratory
Recommended preparation: CSWB 110
Transfer acceptability: CSU
Introduces the 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. Learn to use jQuery to simplify JavaScript development.

CSWB 135   Advanced JavaScript and Mobile Apps   (3)
2½ hours lecture - 1½ hours laboratory
Prerequisite: CSWB 120
Provides the knowledge and skills necessary to use Advanced JavaScript/jQuery techniques to develop dynamic Web applications that display in a browser or on mobile devices. Topics include jQuery Ajax, Mobile Web App Design using jQuery Mobile, DOM (Document Object Model) Navigation, connecting Web pages to server-side programs, XML and JSON.

CSWB 150   PHP with MySQL   (3)
2½ hours lecture - 1½ hours laboratory
Recommended preparation: CSWB 110
Transfer acceptability: CSU
Provides 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.

CSWB 197   Topics in Web Technology   (.5 - 4)
Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture and/or laboratory may be scheduled by the department. Refer to Class Schedule.
Transfer acceptability: CSU
Topics in Web Technology. See class schedule for specific topic offered. Course title will designate subject covered.

CSWB 295   Directed Study in Web Technology   (1, 2, 3)
3, 6, or 9 hours laboratory
Prerequisite: Approval of project or research by department chairperson/director
Transfer acceptability: CSU
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 the Design and Manufacturing Technologies Department for further information.
760-744-1150, ext. 2349
Office: P-8A

Associate Degree, Certificate of Achievement and Certificate of Proficiency requirements are listed in Section 6 (green pages).

COURSE OFFERINGS

Courses numbered under 100 are not intended for transfer credit.

CI 89   Plumbing Codes   (3)
3 hours lecture
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 Association of Plumbing and Mechanical Officials (IAPMO) revisions every three years.

CI 90   Mechanical Codes   (3)
3 hours lecture
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.

CI 100   Building Codes I   (3)
3 hours lecture
Transfer acceptability: CSU
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 International Building Code are every three years.

CI 101   Building Codes II   (3)
3 hours lecture
Transfer acceptability: CSU
A study of the requirements and standards for design, loads, wood, concrete, masonry and steel buildings. The study of exits, roofs, fireplaces, drywall, glass and stucco systems are examined. Interpretation is based on the International Code Council (ICC) building code which is revised every three years.

CI 105   Electrical Codes I   (3)
3 hours lecture
Transfer acceptability: CSU
The first half of The National Electrical Code reviewed in an explanatory, easy-to-understand, yet in-depth manner. Basic electrical theory as it pertains to building construction is discussed with real-life situations used as examples of Code items and inspection techniques. Prepares students for electrical certification tests based on the building codes (both the ICC and the IAEI certifications), as well as advaning knowledge levels for existing Inspectors.

CI 106   Electrical Codes II   (3)
3 hours lecture
Prerequisite: A minimum grade of 'C' in CI 105
Transfer acceptability: CSU
The second half of The National Electrical Code reviewed in an explanatory, easy-to-understand, yet in-depth manner. Basic electrical theory as it pertains to building construction is discussed with real-life situations used as examples of Code items and inspection techniques. Prepares students for electrical certification tests based on the building codes (both the ICC and the IAEI certifications), as well as advancing knowledge levels for existing Inspectors.

CI 115   Nonstructural Plan Review   (3)
3 hours lecture
Transfer acceptability: CSU
A study of basic methods used by plans examiners to check the nonstructural details of construction drawings in compliance with the international building code. Topics cover analyzing nonstructural details and determining compliance with the minimum requirements for concrete, masonry, wood, and steel structures.

CI 125   Plan Reading Technologies   (3)
3 hours lecture
Transfer acceptability: CSU
A survey of technologies in the construction inspection industry relating to plan reading. Content includes an introduction to construction plan reading; a review of the standard details and specifications used in the San Diego region; discussions on the various roles of the construction and building inspectors; employment opportunities and certifications; an overview of special inspection requirements; construction scheduling; and when and how often inspections should be performed. Content also includes an introduction to California Title 24 including the building, plumbing, electrical, mechanical, California Green Codes, and an introduction to the Americans with Disabilities Act (ADA).

CI 130 CalGreen Codes   (3)
3 hours lecture
Transfer acceptability: CSU
Emphasizes the proper interpretation of the California Green Building Code and green building technologies. The scope of the course will provide inspectors, designers and contractors with the latest code requirements and national standards to promote sustainable communities. Topics include site planning and development, energy conservation, storm water pollution prevention and basic sustainability concepts.

CI 197   Construction Inspection Topics   (.5-3)
Units awarded in topics courses are dependent upon the number of hours re-quired of the student. Any combination of lecture and/or laboratory may be scheduled by the department. Refer to Class Schedule.
Transfer acceptability: CSU
Topics in Construction Inspection. 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 Cooperation Education Department for further information.
760-744-1150, ext. 2354
Office: P-8 A
In accordance with Board Policy 4103:

COURSE OFFERINGS
Students may earn a maximum of 16 units in Cooperative Education (CE) in any combination of CE100, CE110, or CE150. CE100 and 150 may not exceed 8 units per semester, and CE 110 may not exceed 6 units per semester

STUDENT QUALIFICATIONS: In order to participate in cooperative work experience education students shall meet the following requirements:

1. Be a legally indentured or a certified apprentice, an intern, volunteer, or a paid employee.
   AND
2. Have approval of the Cooperative Work Experience Education academic personnel.
   AND
3. 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.
   AND
4. Attend orientation(s) at the beginning of the semester.

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 paid hours per semester or session; 60 volunteer hours
2 units - 150 paid hours per semester or session; 120 volunteer hours
3 units - 225 paid hours per semester or session; 180 volunteer hours
4 units - 300 paid hours per semester or session; 240 volunteer hours

CE 100   Cooperative Education   (.5, 1, 2, 3, 4)
2 - 18 1/2 hours laboratory
Transfer acceptability: CSU
Supervised on the job training for all occupational students.
Note: 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.

CE 110   Cooperative Work Experience-General   (.5, 1, 2, 3, 4)
2 or 3 hours lecture - 2 - 18 1/2 hours laboratory
Transfer acceptability: CSU
Supervised on the job training for all students.
Note: 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.

CE 150   Cooperative Education Internship   (.5, 1, 2, 3, 4)
10 or 15 hours laboratory
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.

Counseling (COUN)

See also Disability Resource

Contact the Counseling Department for further information.
760-744-1150, ext. 2179
Office: SSC-18A

COURSE OFFERINGS

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: Pass/No Pass grading only
Transfer acceptability: CSU; UC - COUN 101, 110, and 148 combined: maximum credit, 3 units
Provides the necessary strategies for academic success and the research skills essential for developing a comprehensive transfer plan. Topics will include the transfer process, major selection, student support services, evaluating universities, and clarifying educational goals.

COUN 110   College Success **(3)**
3 hours lecture
Transfer acceptability: CSU; UC - COUN 101, 110, and 148 combined: maximum credit, 3 units
Provides students with the skills and knowledge necessary to reach their educational goals. Topics include academic learning strategies, college and life skills, diversity awareness and assessment of personal characteristics related to educational success. The role of race, ethnicity, gender, class, sexual orientation and age in higher education and personal identity is a central theme of the course.

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 who is in search of identity and self-discovery. An examination of one's value and belief system will be studied and compared and contrasted with other American subcultures. Emphasis will also be placed on the role of cultural traditions and practices as well as a set of life skills that will serve to empower one's identity and understanding of self within a multicultural society. Examples of life skills include coping with the physiological effects of stress and anxiety, communicating effectively with multicultural groups, goal setting, emotional development, problem solving, critical thinking skills, and self-esteem.

COUN 148   Managing Stress and Well-Being **(3)**
3 hours lecture
Transfer acceptability: CSU; UC - COUN 101, 110, and 148 combined: maximum credit, 3 units
Investigates the cultural, sociological, physiological, and psychological sources of stress and well-being across the lifespan. An examination of how the mind-body relationship is affected by personality, thoughts, life events, and messages received within a multicultural society and family will be studied. Students learn mindfulness and stress reduction techniques that resolve stress and anxiety and promote well-being physically, energetically, emotionally, cognitively, socially, and behaviorally.

COUN 165   Career Search **(1)**
1 hour lecture
Note: May be Open entry/Open exit; Pass/No Pass 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: May be Open entry/Open exit; Pass/No Pass 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 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 and/or laboratory may be scheduled by the department. Refer to Class Schedule.
Note: Pass/No Pass grading only
Transfer acceptability: CSU
Topics in Counseling. See Class Schedule for specific topic covered. Course title will designate subject covered.

Dance (DNCE)

Contact the Performing Arts Department for further information.
760-744-1150, ext. 2316
Office: PAC-112
Associate Degree, Certificate of Achievement and Certificate of Proficiency requirements are listed in Section 6 (green pages).

COURSE OFFERINGS

State Regulations (Title 5, Sections 55040-55041) limit the number of times a student may take courses with related content and similar primary educational activities. Therefore, some combinations of course work in Dance have limitations on the number of times a student may enroll. Some Dance courses may be repeated provided student has not reached the limitation for the applicable group of Dance courses. Specific information about enrollment limitations for Dance classes is available at http://www.palomar.edu/schedule/restrictions.htm

Note: Students are screened for level placement in all technique classes the previous semester or the first day of class.

DNCE 100   Survey of Dance **(3)**
3 hours lecture
Transfer acceptability: CSU; UC
Survey of present day dance forms experienced through lecture, film, demonstration, and movement. This course covers dance as an art form, the creative process, ways to view and analyze movement, body mechanics/anatomy, prevention of injuries, education and career opportunities, and a study of various dance genres.

DNCE 101   Survey of World Dance **(3)**
3 hours lecture
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.

DNCE 102   The Hollywood Musical: Dance on Film **(3)**
3 hours lecture
Transfer acceptability: CSU; UC
This course will explore the phenomenon of dance on film from cultural, historical, social, economic, and gender viewpoints.

DNCE 105   Introduction to Dance History **(3)**
3 hours lecture
Transfer acceptability: CSU; UC
A survey of the development of dance from earliest civilizations to the present including Egyptian, Ancient Greek and Roman, and with emphasis on the American Indian and African American influences on the social and performance aspects of dance in the world today.

DNCE 110   Modern Dance I **(.5 - 1)**
1½, 2 or 3 hours laboratory
Transfer acceptability: CSU; UC
Beginning modern dance techniques with emphasis on movement exploration, alignment, and creativity.

DNCE 111   Modern Dance II **(.5 - 1)**
1½, 2 or 3 hours laboratory
Transfer acceptability: CSU; UC
Intermediate dance techniques with emphasis on increasing movement skills and creative range.

DNCE 115   Ballet I   **(.5 - 1)**
1½, 2 or 3 hours laboratory
Transfer acceptability: CSU; UC
Introduction to ballet's traditions, principles, techniques, and terminology. Includes fundamental ballet exercises at barre and center with emphasis on technique and alignment. Introduces concepts of anatomy, kinesiology, health, and wellness.

DNCE 116   Ballet II   **(.5 - 1)**
1½, 2 or 3 hours laboratory
Transfer acceptability: CSU; UC
Continued study of ballet techniques, principles, and terminology. Intermediate level with emphasis on combinations and an enlarged vocabulary of steps and terms.

DNCE 117   Pointe I   **(.5 - 1)**
1½, 2 or 3 hours laboratory
Transfer acceptability: CSU; UC
This course is designed to introduce concepts of pointe technique at the beginning level, while reinforcing intermediate ballet technique. Concentration will be placed on proper alignment, toe placement, ankle strength and flexibility, rotation of the legs from the hip sockets, and overall artistry.

DNCE 118   Pointe II   **(.5 - 1)**
1½, 2 or 3 hours laboratory
Transfer acceptability: CSU; UC
Designed to introduce concepts of pointe technique at the beginning/intermediate level, while reinforcing intermediate ballet technique. Concentration will be placed on proper alignment, toe placement, ankle strength and flexibility, rotation of the legs from the hip sockets, and overall artistry.

DNCE 120   Jazz Technique I   **(.5 - 1)**
1½, 2 or 3 hours laboratory
Transfer acceptability: CSU; UC
Level I jazz movement and floor progressions.

DNCE 121   Jazz Technique II   **(.5 - 1)**
1½, 2 or 3 hours laboratory
Transfer acceptability: CSU; UC
Level II jazz movement and floor progressions.

DNCE 127   Spanish Flamenco I   **(.5 - 1)**
1½, 2 or 3 hours laboratory
Transfer acceptability: CSU; UC
Specific elements of Spanish/Flamenco dance styles: castanets, footwork, and arm technique. Students will explore a variety of Flamenco dances from different regions both traditional and modern.

DNCE 128   Spanish Flamenco II   **(.5 - 1)**
1½, 2 or 3 hours laboratory
Transfer acceptability: CSU; UC
Specific elements of Spanish/Flamenco dance styles: castanets, footwork, and arm technique. Students will explore a variety of Flamenco dances from different regions both traditional and modern.

DNCE 130   Tap I   **(.5 - 1)**
1½, 2 or 3 hours laboratory
Transfer acceptability: CSU; UC
Level I skills in tap dance covering basic and traditional material.

DNCE 131   Tap II   **(.5 - 1)**
1½, 2 or 3 hours laboratory
Transfer acceptability: CSU; UC
Level II skills in tap dance with focus on new trends and styles.

DNCE 135   Ballroom Dance I   **(.5 - 1)**
1½, 2 or 3 hours laboratory
Transfer acceptability: CSU; UC
Development of beginning social dance techniques concerning both standard and contemporary social dance steps and styling.

DNCE 136   Ballroom Dance II   **(.5 - 1)**
1½, 2 or 3 hours laboratory
Transfer acceptability: CSU; UC
Intermediate level social dance skills, steps, and styling.

DNCE 137   Cuban and Brazilian Drumming I   **(.5 - 1)**
1½, 2 or 3 hours 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, popular and folkloric; Rumba, Congo (Makuta/Palo), Franco/Haitian (Gaga/Congo Layet) from East and West Cuba. Develop ability to work as a drum ensemble.

DNCE 138   Cuban and Brazilian Drumming II   **(.5 - 1)**
1½, 2 or 3 hours laboratory
Limitation on enrollment: *Enrollment subject to audition*
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 140   Dance Improvisation I   **(.5 - 1)**
1½, 2 or 3 hours laboratory
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   **(.5 - 1)**
1½, 2 or 3 hours laboratory
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   **(3)**
3 hours lecture
Corequisite: *DNCE 280*
Transfer acceptability: CSU; UC
Beginning choreography with emphasis on combining movements and developing ideas in relation to motivation, design, and dynamics. Discuss forms and learn how to articulate the art of dance.

DNCE 146   Choreography II   **(3)**
3 hours lecture
Corequisite: *DNCE 285*
Transfer acceptability: CSU; UC
Intermediate choreography with emphasis on combining movements and developing ideas in relation to movements and developing ideas in relation to motivation and form. Discuss forms and develop the skills to articulate the art of dance.

DNCE 147   Repertory   **(.5 - 1)**
1½, 2 or 3 hours laboratory
Transfer acceptability: CSU
Learning, rehearsing, and performing dances as an outreach to Palomar College, area high schools, and the community.

DNCE 148   Drum and Dance Ensemble I   **(.5, 1, 1.5)**
1½, 3 or 4½ hours laboratory
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   (1, 1.5)
1½, 3 or 4½ hours laboratory
Transfer acceptability: *CSU; UC*
A beginning movement class designed to introduce students to the unique and vibrant dance traditions of Cuba and Brazil. Introduces beginning level concepts of anatomy, kinesiology, health, and wellness as they relate to Afro-Cuban and Brazilian dance.

DNCE 150   Afro-Cuban/Brazilian Dance II   (.5, 1, 1.5)
1½, 3 or 4½ hours laboratory
Transfer acceptability: *CSU; UC*
Intermediate level of Afro-Cuban/Brazilian movement, with emphasis on combinations, and developing a larger vocabulary of the traditional dances explored in this class.

DNCE 151   Latin Social Dance I   (.5, 1, 1.5)
1½, 2, 3 or 4½ hours laboratory
Transfer acceptability: *CSU; UC*
A movement class designed to introduce students to the vibrant Hispanic culture through contemporary social dances. Through demonstration and participation students will explore a variety of social dances that are all part of the Latin Diaspora. Also promoted life-long health and fitness practices.

DNCE 152   Latin Social Dance II   (.5, 1, 1.5)
1½, 2, 3 or 4½ hours laboratory
Transfer acceptability: *CSU; UC*
A movement class designed to continue exploring the vibrant Hispanic culture through a variety of contemporary social dances. Through demonstration and participation students will explore a variety of social dances that are all part of the Latin Diaspora.

DNCE 153   Capoeira: Afro/Brazilian Martial Arts I   (.5 - 1)
1½, 2 or 3 hours laboratory
Transfer acceptability: *CSU; UC – Credit determined by UC upon review of course syllabus.*
Designed to introduce students to the unique martial art form from Brazil known as Capoeira and promote life-long health and fitness practices.

DNCE 154   Capoeira: Afro/Brazilian Martial Arts II   (.5 - 1)
1½, 2 or 3 hours laboratory
Transfer acceptability: *CSU; UC – Credit determined by UC upon review of course syllabus.*
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 155   Hip Hop I   (.5 - 1)
1½, 2 or 3 hours laboratory
Transfer acceptability: *CSU; UC*
Beginning level of Hip Hop, an exhilarating class. Designed to introduce students to this unique contemporary dance form.

DNCE 156   Hip Hop II   (.5 - 1)
1½, 2 or 3 hours laboratory
Transfer acceptability: *CSU; UC*
Intermediate level of Hip Hop, an exhilarating class. Designed to introduce students to this unique contemporary dance form.

DNCE 158   Hawaiian and Tahitian Dance I   (.5 - 1)
1½, 2 or 3 hours laboratory
Transfer acceptability: *CSU; UC*
An exhilarating level one dance 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   Hawaiian and Tahitian Dance II   (.5 - 1)
1½, 2 or 3 hours laboratory
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 161   Teaching Methods in Dance   (3)
3 hours lecture
Transfer acceptability: *CSU*
Explore the teaching/learning/knowing 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 personal pedagogies. The construction of a safe and consistent dance environment for all ages will be covered.

DNCE 162   Near and Middle Eastern I   (.5 - 1)
1½, 2 or 3 hours laboratory
Transfer acceptability: *CSU; UC*
An introduction to classical and folkloric dances from the Near and Middle East.

DNCE 163   Near and Middle Eastern II   (.5 - 1)
1½, 2 or 3 hours laboratory
Transfer acceptability: *CSU; UC*
A more in-depth study of classical and folkloric dances for the Near and Middle East.

DNCE 165   Production Management   (1.5, 2, 2.5)
1, 1½, or 2 hours lecture - 1½, 2, or 3 hours laboratory
Transfer acceptability: *CSU*
Principles and methods of organization, operation, promotion, programming, publicity, ticket sales, box offic, public relations, costumes, props, and graphics. Practical experience in college and community dance productions.

DNCE 170   Pilates®   (.5 - 1)
1½, 2 or 3 hours laboratory
Transfer acceptability: *CSU; UC*
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 I   (1)
3 hours laboratory
Note: *Cross listed as MUS 173/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 174   Musical Theatre Scenes II   (3)
3 hours lecture
Prerequisite: *A minimum grade of 'C' in DNCE/MUS/TA 173*
Note: *Cross listed as TA/MUS 174*
Transfer acceptability: *CSU*
A continuation of Musical Theatre Scenes I. A deeper exploration into the acting, singing, and dancing necessary for Broadway Musicals from the 1930's to present.

DNCE 182   Introduction to Arts Management   (3)
9 hours laboratory
Note: *Cross listed as AMS 182/ART 182/MUS 182/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
Note: *Cross listed as AMS 183/ART 183/MUS 183/TA 183*
Transfer acceptability: *CSU*
Practical experience in arts management in the visual and performing arts.

DNCE 190   World Dance Production I   **(.5, 1, 1.5)**
1½, 3 or 4½ hours laboratory
Transfer acceptability: *CSU; UC*
Rehearsal and performance experience of World Dance. The first experience focuses on large ensemble work and musicality.

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 and/or laboratory may be scheduled by the department. Refer to Class Schedule.
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 205   Modern Dance III   **(.5 - 1)**
1½, 2 or 3 hours laboratory
Transfer acceptability: *CSU; UC*
Intermediate dance technique with emphasis on performance skills.

DNCE 206   Modern Dance IV   **(.5 - 1)**
1½, 2 or 3 hours laboratory
Transfer acceptability: *CSU; UC*
Advanced level modern dance technique with an emphasis on performance skills.

DNCE 210   Ballet III   **(.5 - 1)**
1½, 2 or 3 hours laboratory
Transfer acceptability: *CSU; UC*
Ballet techniques, principles, and terminology at the advanced level with emphasis on line, phrasing, endurance, and progressively difficult steps and combinations. Further explores more advanced concepts of anatomy, kinesiology, health, and wellness.

DNCE 211   Ballet IV   **(.5 - 1)**
1½, 2 or 3 hours laboratory
Transfer acceptability: *CSU; UC*
Ballet techniques, principles, and terminology at the advanced level with emphasis on line, phrasing, endurance, musicality, and progressively difficult steps and combinations.

DNCE 215   Jazz Technique III   **(.5 - 1)**
1½, 2 or 3 hours laboratory
Transfer acceptability: *CSU; UC*
Level III jazz movement and floor progressions.

DNCE 216   Jazz Technique IV   **(.5 - 1)**
1½, 2 or 3 hours laboratory
Transfer acceptability: *CSU; UC*
Level IV jazz dance technique in commercial dance stylizations and rhythms.

DNCE 217   Pointe III   **(.5 - 1)**
1½, 2 or 3 hours laboratory
Transfer acceptability: *CSU; UC*
This course is designed to introduce concepts of pointe technique at the Intermediate level, while reinforcing intermediate ballet technique. Concentration will be placed on proper alignment, toe placement, ankle strength and flexibility, rotation of the legs from the hip sockets, and overall musicality artistry.

DNCE 218   Pointe IV   **(.5 - 1)**
1½, 2 or 3 hours laboratory
Transfer acceptability: *CSU; UC*
This course is designed to introduce concepts of pointe technique at the advanced level, while reinforcing advanced ballet technique. Concentration will be placed on proper alignment, toe placement, ankle strength and flexibility, rotation of the legs from the hip sockets, and overall artistry.

DNCE 225   Contemporary Dance Ensemble I   **(.5 - 1)**
1½, 2 or 3 hours laboratory
Transfer acceptability: *CSU; UC*
An initial rehearsal and performance experience in a dance ensemble. Includes preparing multiple works for a variety of different performing opportunities. Generally this would involve corps (group) roles.

DNCE 226 Contemporary Dance Ensemble II   **(.5 - 1)**
1½ - 3 hours laboratory
Transfer acceptability: *CSU; UC*
A second rehearsal and performance experience in a dance ensemble. Includes preparing multiple works for a variety of different performing opportunities. Generally this would involve smaller supporting roles (smaller group work) and solo work.

DNCE 230   Tap III   **(.5 - 1)**
1½, 2 or 3 hours laboratory
Transfer acceptability: *CSU; UC*
Advanced skills in tap dance with focus on new trends and styles.

DNCE 231   Tap IV   **(.5 - 1)**
1½, 2 or 3 hours laboratory
Transfer acceptability: *CSU; UC*
Level IV skills in tap dance with focus on new trends and styles.

DNCE 237   Cuban and Brazilian Drumming III   **(.5-1)**
1½ to 3 hours laboratory
Transfer acceptability: *CSU; UC*
The third course in this series focuses on being able to hold supporting roles in ensemble style presentations.

DNCE 238   Cuban and Brazilian Drumming IV   **(.5-1)**
1½ to 3 hours laboratory
Transfer acceptability: *CSU; UC*
The fourth course in the series focuses on being able to hold leading roles in ensemble style presentations as well as supporting roles for the Palomar Drum and Dance Ensemble and Palomar dance classes.

DNCE 248   Drum and Dance Ensemble II   **(.5, 1, 1.5)**
1½, 3, or 4½ hours laboratory
Transfer acceptability: *CSU; UC*
A second rehearsal and performance in the Drum and Dance Ensemble. Includes preparing multiple works for a variety of different performing opportunities including world festivals and campus events. Generally this would involve larger supporting roles or small ensemble work.

DNCE 249   Afro-Cuban/Brazilian Dance III   **(.5, 1, 1.5)**
1½, 3, or 4½ hours laboratory
Transfer acceptability: *CSU; UC*
Intermediate level of Afro-Cuban/Brazilian movement, with an emphasis on combinations, stylization, musicality, and progressively difficult movement, as well as full pieces of choreography.

DNCE 250   Afro-Cuban/Brazilian Dance IV   **(.5, 1, 1.5)**
1½, 3, or 4½ hours laboratory
Transfer acceptability: *CSU; UC*
Advanced level of Afro-Cuban/Brazilian movement, with an emphasis on stylization, musicality, and progressively difficult movement, as well as full pieces of choreography. This level will also focus on performance readiness.

DNCE 251   Latin Social Dance III   (.5, 1, 1.5)
1½, 2, 3 or 4½ hours laboratory
Transfer acceptability: CSU; UC
A movement class designed to review dances from levels I & II, and introduce more advanced vocabulary. Through demonstration and movement participation students will continue to explore a variety of social dances that are all part of the Latin Diaspora.

DNCE 252   Latin Social Dance IV   (.5, 1, 1.5)
1½, 2, 3 or 4½ hours laboratory
Transfer acceptability: CSU; UC
An advanced movement class, designed to challenge students in their knowledge and ability of contemporary Latin Social dances, presented in this family of courses. Through demonstration and movement participation students will continue to explore a variety of social dances that are all part of the Latin Diaspora.

DNCE 253   Capoeira: Afro/Brazilian Martial Arts III   (.5 - 1)
1½, 2 or 3 hours laboratory
Transfer acceptability: CSU; UC
Through lecture, demonstration and movement participation students will study intermediate level Capoeira.

DNCE 254   Capoeira: Afro/Brazilian Martial Arts IV   (.5 - 1)
1½, 2 or 3 hours laboratory
Transfer acceptability: CSU; UC
Through lecture, demonstration and movement participation students will study advanced level Capoeira.

DNCE 255   Hip Hop III   (.5 - 1)
1½, 2 or 3 hours laboratory
Transfer acceptability: CSU; UC
Advanced level of Hip Hop, an exhilarating class designed to introduce students to this unique contemporary dance form.

DNCE 256   Hip Hop IV   (.5 - 1)
1½, 2 or 3 hours laboratory
Transfer acceptability: CSU; UC
Level IV dance with focus on new trends and styles.

DNCE 258   Hawaiian and Tahitian Dance III   (.5 - 1)
1½, 2 or 3 hours laboratory
Transfer acceptability: CSU; UC
An exhilarating level III dance class teaching 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 259   Hawaiian and Tahitian Dance IV   (.5 - 1)
1½, 2 or 3 hours laboratory
Transfer acceptability: CSU; UC
Level IV dance technique of 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 262   Near and Middle Eastern III   (.5 - 1)
1½, 2 or 3 hours laboratory
Transfer acceptability: CSU; UC
Level III study of classical and folkloric dances for the Near and Middle East.

DNCE 263   Near and Middle Eastern IV   (.5 - 1)
1½, 2 or 3 hours laboratory
Transfer acceptability: CSU; UC
Advanced level IV study of classical and folkloric dances for the Near and Middle East.

DNCE 270   Contemporary Ballet Production I   (.5 - 1)
1½, 2 or 3 hours laboratory
Transfer acceptability: CSU; UC
Rehearsal and performance for dance concerts, outreach and community events.

DNCE 271   Classical Ballet Production I   (.5 - 1)
1½, 2 or 3 hours laboratory
Transfer acceptability: CSU; UC
Rehearsal and performance for dance concerts, outreach and special events.

DNCE 272   Contemporary Ballet Production II   (.5 - 1)
1½, 2 or 3 hours laboratory
Transfer acceptability: CSU; UC
Rehearsal and performance for dance concerts, outreach, and special events.

DNCE 273   Modern Dance Production I   (.5 - 1)
1½, 2 or 3 hours laboratory
Transfer acceptability: CSU; UC
Rehearsal and performance for dance concerts, outreach and special events.

DNCE 274   Contemporary Modern Dance Production I   (.5 - 1)
1½, 2 or 3 hours laboratory
Transfer acceptability: CSU; UC
Rehearsal and performance for dance concerts, outreach, and special events.

DNCE 275   Modern Dance Production II   (.5 - 1)
1½, 2 or 3 hours laboratory
Transfer acceptability: CSU; UC
Rehearsal and performance for dance concerts, outreach, and special events.

DNCE 276   Contemporary Modern Dance Production II   (.5 - 1)
1½, 2 or 3 hours laboratory
Transfer acceptability: CSU; UC
Rehearsal and production for dance concerts, outreach and special events.

DNCE 277   Classical Jazz Production I   (.5 - 1)
1½, 2 or 3 hours laboratory
Transfer acceptability: CSU; UC
Rehearsal and performance for dance concerts, outreach, and special events.

DNCE 278   Modern Jazz Production I   (.5 - 1)
1½, 2 or 3 hours laboratory
Transfer acceptability: CSU; UC
Rehearsal and performance for dance performance, outreach, and special events.

DNCE 279   Tap Production I   (.5 - 1)
1½, 2 or 3 hours laboratory
Transfer acceptability: CSU; UC
Rehearsal and performance for dance concerts, outreach and special events.

DNCE 280   Student Choreography Production I   (1.5, 2)
4½ or 6 hours laboratory
Corequisite: DNCE 146
Transfer acceptability: CSU; UC
Rehearsal and performance for dance concerts.

DNCE 281   Summer Dance Workshop   (.5, 1, 1.5)
1½, 2, 3 or 4½ hours laboratory
Transfer acceptability: CSU; UC
Concentrated work in a variety of dance genres. Specific content is composed of various dance styles, techniques and rehearsal/performance opportunities.

DNCE 282 Classical Ballet Production II   (.5-1)
1½ - 3 hours laboratory
Transfer acceptability: CSU; UC
Further explores the rehearsal and performance experience of a classical ballet. This second experience concentrates on smaller ensemble work and solos, resulting in multiple performances of the same work on a proscenium stage.

DNCE 283   Musical Theatre Scenes III   (1)
3 hours laboratory
Note: *Cross listed as MUS/TA 283*
Transfer acceptability: CSU
A continuation of Musical Theatre scenes II with emphasis on more advanced acting, singing and dance techniques.

DNCE 284   Musical Theatre Scenes IV   (1)
3 hours laboratory
Prerequisite: *DNCE 283*
Note: *Cross listed as MUS/TA 284*
Transfer acceptability: CSU
Exploring the rehearsing and performing of Musical Theatre acting, singing, and dancing at the advanced level.

DNCE 285   Student Choreography Production II   (1.5-2)
4½ - 6 hours laboratory
Corequisite: *Dance 146*
Transfer acceptability: CSU; UC
Further explores the rehearsal and performance of a student-based choreography focusing on smaller ensemble and solo work.

DNCE 287 Classical Jazz Production II   (.5-1)
1½ - 3 hours laboratory
Transfer acceptability: CSU; UC
Further explores the rehearsal and performance experience of a classical jazz work in the style of 1940's-1960's Hollywood/concert jazz styles. This second experience focuses on small ensemble work, solo work and musicality.

DNCE 288 Modern Jazz Production II   (.5-1)
1½ - 3 hours laboratory
Transfer acceptability: CSU; UC
Further explores the rehearsal and performance experience in current Jazz styles. This second experience focuses on small ensemble work, solos, and musicality.

DNCE 289 Tap Production II   (.5-1)
1½ - 3 hours laboratory
Transfer acceptability: CSU; UC
Further explores the rehearsal and performance experience of tap choreography. Concentrates on small ensemble work and solos, resulting in multiple performances of the same work on a proscenium stage.

DNCE 290 World Dance Production II   (.5, 1, 1.5)
1½, 3, or 4½ hours laboratory
Transfer acceptability: CSU; UC
Further explores the rehearsal and performance experience of World Dance. This second experience focuses on small ensemble work and musicality.

DNCE 296   Independent Projects in Dance   (.5, 1, 1.5)
1½, 2, 3 or 4½ hours laboratory
Transfer acceptability: CSU; UC
Fostering creative research and independent study projects in dance.

DNCE 297   Experimental Projects in Dance   (.5, 1, 1.5)
1½, 2, 3 or 4½ hours laboratory
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.

Database
See CSIT - Information Technology

Dental Assisting (DA)
Contact the Dental Assisting Program for further information.
760-744-1150, ext. 2571
Office: HS-107
Associate Degree, Certificate of Achievement and Certificate of Proficiency requirements are listed in Section 6 (green pages).

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 and/or laboratory may be scheduled by the department. Refer to Class Schedule.
Note: *Pass/No Pass grading only*
Non-degree Applicable
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; California Dental Practice Act, psychology and observation in dental offices.

DA 57   Dental Sciences and Anatomy   (3)
3 hours lecture
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 Registered 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 Registered Dental Assisting Program*
Note: *Graded only*
Reception and care of the patient in the dental office, communication skills, telephone techniques, appointment scheduling, dental computer software, dental records (charting health and dental history), filing, bookkeeping, accounts receivable and accounts payable, inventory management, principles of and use of insurance forms and collections.

DA 70 Dental Radiography I (2.5)
2 hours lecture - 2 hours laboratory
Prerequisite: *Admission to the Registered Dental Assisting Program*
Note: *Graded only*
Theory and technique of oral radiography, radiation hygiene, anatomical landmarks, and methods and materials for processing radiographs using film and dental radiography. The laboratory portion will provide the student with knowledge concerning film and digital sensor placement, cone angulation, exposing and developing radiographs, and mounting and evaluating processed films and digital radiographs.

DA 71 Dental Radiography II (.5)
1½ hours laboratory
Prerequisite: *A minimum grade of 'C' in DA 50 and 70, and proof of Hepatitis B Immunization; and current BLS for Healthcare Providers Certificate*
Note: *Graded only*
Advanced clinical experience regarding film and digital sensor placement, cone angulation, exposing and developing radiographs, mounting and evaluating radiographs.

DA 75 Dental Operative Procedures (5)
3 hours lecture - 6 hours laboratory
Prerequisite: *Admission to the Registered Dental Assisting Program*
Note: *Graded only*
Applications of and introduction to preclinical dental assisting in operative and specialty dental procedures, care of equipment, instrumentation, infection control, disease transmission, charting, utilization of dental materials, dental office emergencies, and functions delegated to the California Registered Dental Assistant.

DA 82 Preventive Dentistry I (1.5)
1 hour lecture - 1½ hours laboratory
Prerequisite: *Admission to the Registered Dental Assisting Program*
Note: *Graded Only*
This course teaches laboratory and clinical applications of coronal polishing, periodontics, preventive dentistry and placement of pit and fissure sealants.

DA 83 Preventive Dentistry II (.5)
2 hours laboratory
Prerequisite: *A minimum grade of 'C' in DA 82*
Note: *Pass/No Pass grading only*
Application of concepts and skills from DA 82. Emphasis is on the coronal polishing procedure and pit and fissure sealants as applied to clinical patients.

DA 85 Advanced Dental Procedures (5)
3 hours lecture - 6 hours laboratory
Prerequisite: *A minimum grade of 'C' in DA 50 , 60 and 75, and proof of Hepatitis B Immunization; and 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, 4) fabrication of provisional restorations, and 5) advanced prosthodontic and orthodontic instruction.

DA 90 Clinical Rotation (6)
19 hours laboratory/clinical
Prerequisite: *A minimum grade of 'C' in DA 50 and 75, and proof of Hepatitis B Immunization; and current BLS for Healthcare Providers Certificate*
Note: *Pass/No Pass only*
An intensive program of clinical dental experiences, working with patients and staff at clinics 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 and/or laboratory may be scheduled by the department. Refer to Class Schedule.
Note: *Pass/No Pass only*
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
Office: T-102A
Associate Degree, Certificate of Achievement and Certificate of Proficiency requirements are listed in Section 6 (green pages).

COURSE OFFERINGS

Courses numbered under 100 are not intended for transfer credit.

DMT 100 Introduction to Diesel Mechanics (4)
3 hours lecture - 3 hours laboratory
Transfer acceptability: *CSU*
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 105 Heavy-Duty Diesel Tune Up and Engine Analysis (4)
3 hours lecture - 3 hours laboratory
Prerequisite: *A minimum grade of 'C' in DMT 100*
Transfer acceptability: *CSU*
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 110 Heavy-Duty Electricity (4)
3 hours lecture - 3 hours laboratory
Transfer acceptability: *CSU*
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 115 Alternative Fuels (4)
3 hours lecture - 3 hours laboratory
Recommended preparation: *DMT 100*
Transfer acceptability: *CSU*
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 120 Air Brake Systems (4)
3 hours lecture - 3 hours laboratory
Transfer acceptability: *CSU*
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 125 Truck Transmission and Drive Lines (4)
3 hours lecture - 3 hours laboratory
Transfer acceptability: *CSU*
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 130   Medium Duty Diesel Engine Tune Up   (4)
3 hours lecture - 3 hours laboratory
Transfer acceptability: *CSU*
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 135   Basic Hydraulics   (4)
3 hours lecture - 3 hours laboratory
Transfer acceptability: *CSU*
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 196   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 or laboratory may be scheduled by the department. Refer to Class Schedule.
Transfer acceptability: *CSU*
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 197   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 or laboratory may be scheduled by the department. Refer to Class Schedule.
Transfer acceptability: *CSU*
A special selection of topics specific in nature. The contents will vary depending on specific needs of the students and community.

DMT 200   Diesel Engine Rebuilding I   (4)
3 hours lecture - 3 hours laboratory
Prerequisite: *A minimum grade of 'C' in DMT 100*
Recommended preparation: *DMT 105*
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 201   Diesel Engine Rebuilding II   (4)
3 hours lecture - 3 hours laboratory
Prerequisite: *A minimum grade of 'C' in DMT 200*
Transfer acceptability: *CSU*
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.

Digital Broadcast Arts (DBA)

Contact the Media Studies Department for further information.,
(769) 744-1150, ext. 2440
Office: P-31
Associate Degree, Certificate of Achievement and Certificate of Proficiency requirements are listed in Section 6 (green pages).

COURSE OFFERINGS

Courses numbered under 100 are not intended for transfer credit.

DBA 100   Introduction to Radio and TV   (3)
3 hours lecture
Note: *May not be taken for Pass/No Pass grading*
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.

DBA 100L   Introduction to Radio and Television Laboratory (1)
3 hours laboratory
Note: *May not be taken for Pass/No Pass grading*
Transfer acceptability: *CSU*
Practice in use of radio and television studio equipment. Designed for students who are not Radio Television majors.

DBA 105   Multimedia Storytelling   (2)
2 hours lecture
Transfer acceptability: *CSU*
Backpack Journalism is a new field born from traditional media outlets such as broadcast news, print journalism, public radio and the hallmarks of our contemporary digital era; social media, vlogging and the internet's unquenchable appetite for multi-media content. This course introduces students to the basic skills and techniques required of modern journalists and digital storytellers - from capturing clean and compelling video, audio and interviews to crafting and editing short, character driven narratives worthy of your world's attention.

DBA 110   Broadcast Writing and Producing   (3)
1½ hours lecture - 4½ hours laboratory
Note: *May not be taken for Pass/No Pass grading*
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.

DBA 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.

DBA 120   Digital Television Studio Production   (3)
1½ hours lecture - 4½ hours laboratory
Note: *Cross listed as ENTT 120; may not be taken for Pass/No Pass grading*
Transfer acceptability: *CSU*
The course introduces theory, terminology, practices, and aesthetic considerations of visual and sound productions in a multi-camera television studio and control room. Topics include studio signal flow, directing, theory and operation of camera and audio equipment, switcher operation, fundamentals of lighting, graphics, video control and video recording and real-time video production.

DBA 125   Beginning Single Camera Film and
**   Video Production   (3)**
1½ hours lecture - 4½ hours laboratory
Recommended preparation: *CINE 100 or DBA 100L*
Note: *Cross listed as CINE 125*
Transfer acceptability: *CSU; UC – CINE/DBA 125 and 225 combined: maximum credit, one course*
This course provides an introduction to the theory, terminology, and operation of single camera film and video production as it applies to narrative storytelling for film and television. Areas of study include basic elements of screenwriting and production design, cinematography including camera operation, digital video and audio recording and basic editing techniques. It focuses on the aesthetics and fundamentals of scripting, producing, directing on location, postproduction and exhibition/distribution. Students may shoot on Super 8mm, 16mm film or digital video.

DBA 130   Radio Production   (3)
1½ hours lecture - 4½ hours laboratory
Note: *Cross listed as ENTT 130; may not be taken for Pass/No Pass grading*
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. A program produced by the student will be broadcast on radio station KKSM.

DBA 135A   Basic Radio Station Operations   (3)
9 hours laboratory
Prerequisite: A minimum grade of 'C' in DBA/ENTT 130
Note: May not be taken for Pass/No Pass grading
Transfer acceptability: CSU
Introduction to radio station operations and audio production skills along with practical exercises using broadcast equipment and techniques.

DBA 135B   Beginning Radio Station Operations   (3)
9 hours laboratory
Prerequisite: A minimum grade of 'C' in DBA 135A
Note: May not be taken for Pass/No Pass grading
Transfer acceptability: CSU
Beginning radio station operations and audio production skills with emphasis on developing a format radio show.

DBA 135C   Intermediate Radio Station Operations   (3)
9 hours laboratory
Prerequisite: A minimum grade of 'C' in DBA 135B
Note: May not be taken for Pass/No Pass grading
Transfer acceptability: CSU
Intermediate radio station operations and audio/editing production skills with emphasis on creating a unique radio show.

DBA 135D   Advanced Radio Station Operations   (3)
9 hours laboratory
Prerequisite: A minimum grade of 'C' in DBA 135C
Note: May not be taken for Pass/No Pass grading
Transfer acceptability: CSU
Advanced radio station programming operations and audio production editing. Special emphasis in broadcast management training.

DBA 150   Performance and Acting for Broadcast and Film   (3)
1½ hours lecture - 4½ hours laboratory
Note: May not be taken for Pass/No Pass grading
Transfer acceptability: CSU
Techniques of preparation and delivery of materials before microphone and camera.

DBA 170   Introduction to Video Editing   (3)
1½ hours lecture - 4½ hours laboratory
Note: Cross listed as CINE 170; may not be taken for Pass/No Pass grading
Transfer acceptability: CSU
Covers the technical and theoretical aspects of film and video editing. Provides an introduction to the basic techniques, elements of editing language, the various technical processes used, introduction to Final Cut Pro software, as well as the related skills necessary for editing digital media.

DBA 180   Sports Broadcasting   (3)
1½ hours lecture - 4½ hours laboratory
Note: May not be taken for Pass/No Pass grading
Transfer acceptability: CSU
Sports broadcasting: anchoring, reporting, play-by-play, and color announcing techniques.

DBA 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 and/or laboratory may be scheduled by the department.
Note: May not be taken for Pass/No Pass grading
Transfer acceptability: CSU
Topics in Radio and Television. See Class Schedule for specific topic offered. Course title will designate subject covered.

DBA 220   TV Production and Directing   (3)
1½ hours lecture - 4½ hours laboratory
Note: May not be taken for Pass/No Pass grading
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.

DBA 225   Intermediate Single Camera Film and
**   Video Production   (3)**
1½ hours lecture - 4½ hours laboratory
Prerequisite: A minimum grade of 'C' in CINE/DBA 125
Note: Cross listed as CINE 225
Transfer acceptability: CSU; UC – CINE/DBA 125 and 225 combined: maximum credit, one course.
This course goes beyond the basics to provide a more extensive study of the theory, terminology, and operation of single camera film and video production as it applies to narrative and documentary film and television. Topics include basic cinematography including the operation, function and creative uses of production and post-production equipment, scriptwriting, camera operation, shot composition, lighting, sound recording and mixing, and editing. Students may shoot on Super 8mm, 16mm film or digital video.

DBA 230   Digital Audio Avid Pro Tools   (3)
1½ hours lecture - 4½ hours laboratory
Transfer acceptability: CSU
Principles and techniques of editing radio, television, and film audio projects using Avid Pro Tools software and technology. Digitizing audio source material, working knowledge of Avid Pro Tools interface, use of multi-track audio editing system, mic and recording techniques.

DBA 240A   Basic Television News/Sports   (3)
1½ hours lecture - 4½ hours laboratory
Prerequisite: A minimum grade of 'C' in DBA/ENTT 120; completion of, or concurrent enrollment in DBA/ENTT 120
Note: May not be taken for Pass/No Pass grading
Transfer acceptability: CSU
Basic principles of broadcast scripting, gathering, and editing of television news and/or sports. Learn the technical studio production elements of a news or sports cast.

DBA 240B   Beginning Television News/Sports   (3)
1½ hours lecture - 4½ hours laboratory
Prerequisite: A minimum grade of 'C' in DBA 240A
Note: May not be taken for Pass/No Pass grading
Transfer acceptability: CSU
Students perform as members of the TV News and Sports broadcast team at a beginning level. Students will assist in the production of the College's various live newscasts and sportscasts for airing on cable television, and will participate in a variety of TV broadcast roles.

DBA 240C   Intermediate Television News/Sports   (3)
1½ hours lecture - 4½ hours laboratory
Prerequisite: A minimum grade of 'C' in DBA 240B
Note: May not be taken for Pass/No Pass grading
Transfer acceptability: CSU
Intermediate level skills are applied as members of the on-air crew and production team, producing TV News and Sports broadcasts. Students will produce the College's various live newscasts and sportscasts for airing on cable television, participating in a variety of TV broadcast roles.

DBA 240D   Advanced Television News/Sports   (3)
1½ hours lecture - 4½ hours laboratory
Recommended preparation: *DBA 240C*
Note: *May not be taken for Pass/No Pass grading*
Transfer acceptability: *CSU*
Advanced principles and application of techniques and theory of local TV News reporting, sports reporting, news gathering, producing, and editing an ongoing weekly TV news/sports program. Production of newscasts for airing on cable television.

DBA 270   Digital Video Editing   (3)
1½ hours lecture - 4½ hours laboratory
Note: *Cross listed as CINE 270*
Note: *May not be taken for Pass/No Pass grading*
Transfer acceptability: *CSU*
Principles and techniques of digital non-linear video editing for broadcast TV and film. Overview of Adobe Premiere software program. Application of professional operational and aesthetic editing principles.

DBA 275   Avid Editing for Television and Film   (3)
1½ hours lecture - 4½ hours laboratory
Note: *Cross listed as CINE 275*
Note: *May not be taken for Pass/No Pass grading*
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.

DBA 298A   Beginning Broadcast Internship   (3)
9 hours laboratory
Note: *May not be taken for Pass/No Pass grading*
Transfer acceptability: *CSU*
Beginning internships at radio and television broadcast stations, Palomar College TV, cable companies, and other communications facilities. Prior internship experience not required; assumes entry-level skills and production experience. May involve entry-level work on independent productions including research, scripting, and pre-production planning.

DBA 298B   Intermediate Broadcast Internship   (3)
9 hours laboratory
Prerequisite: *A minimum grade of 'C' in DBA 298A*
Note: *May not be taken for Pass/No Pass grading*
Transfer acceptability: *CSU*
Intermediate internships at radio and television broadcast stations, Palomar College TV, cable companies, network affiliates, and other communications facilities. At least one prior internship experience required; assumes intermediate level skills and production experience, and may involve intermediate level duties and assignments. May involve intermediate level work on independent productions, including research, scripting, pre-production planning, and shooting.

DBA 298C   Advanced Broadcast Internships   (3)
9 hours laboratory
Prerequisite: *A minimum grade of 'C' in DBA 298B*
Note: *Cross listed as ENTT 298C; may not be taken for Pass/No Pass grading*
Transfer acceptability: *CSU*
Work on advanced television production including individual research, work on advanced college produced programs, or internships at local Network affiliate broadcast stations, radio stations, cable companies, and other professional communications facilities.

Disability Resource (DR)

Contact the Disability Resousrce Center for further information.
760-744-1150, ext. 2375
Office: DSPS

COURSE OFFERINGS

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

DR 10   Educational Assessment/Guidance   (0.5)
½ hour lecture
This individualized course is designed to assess and identify strengths and weaknesses for the purpose of identifying learning disabilities following the California Community College eligibility model. This assessment will help identify student's need for academic accommodations in the community college setting. The student will be counseled in planning appropriate educational goals and strengthen the student's understanding of the results and applications of his/her learning disabilities.

DR 15   English Essentials for Students with Disabilities   (3)
3 hours lecture
Note: *Pass/No Pass grading only; Students must have the ability to learn in a group setting. Students must be able to produce computer generated work by using the keyboard or other assistive technology.*
Non-degree Applicable
Provides special assistance for students with disabilities to develop basic skills in written communication. Working with computers is part of the class format.

DR 40   Adapted Computer Skills   (3)
3 hours lecture
Non-degree Applicable
Provides computer training using specialized software and hardware adaptations to assist students with disabilities to develop skills in word processing and Internet research.

DR 41   Advanced Adapted Computers for Students with Disabilities   (3)
3 hours lecture
Recommended preparation: *DR 40*
Non-degree Applicable
Provides training in more advanced software for students with disabilities by using their prescribed access technology.

DR 43.1   Software for Students with Vision Loss I   (3)
3 hours lecture
Recommended Preparation: *Keyboarding skills with a minimum of 15 words per minute*
Non-degree Applicable
Provides training using specialized software and hardware adaptations to assist students with blindness/low vision to develop computer skills.

DR 43.2   Software for Students with Vision Loss II   (3)
3 hours lecture
Recommended Preparation: *Keyboarding skills with a minimum of 15 words per minute along with prior experience with a screen reading or magnification application*
Non-degree Applicable
Provides training using specialized software and hardware adaptations in combination with Microsoft Office, Internet Explorer, and other academic applications.

DR 45L   Adapted Computer Laboratory   (1)
3 hours laboratory
Note: *Pass/No Pass grading only*
Non-degree Applicable
Provides supervised hands on opportunities to acquire and reinforce skills on computer equipment adapted for students with disabilities.

Drafting Technology (DT)

Contact the Design and Manufacturing Technologies Department for further information.
760-744-1150, ext. 2349
Office: P-8A

Associate Degree, Certificate of Achievement and Certificate of Proficiency requirements are listed in Section 6 (green pages).

COURSE OFFERINGS

DT 101   AutoCAD I   (3)
1½ hours lecture - 4½ hours laboratory
Note: *Cross listed as ENGR 101.*
Transfer acceptability: *CSU; UC – DT/ENGR 101 and 102 combined: maximum credit, one course*
An introduction to applied drafting theory, principles, and techniques for computer aided drafting using AutoCAD software. AutoCAD fundamentals include drawing, modifying, annotating (creating text, dimensioning, tolerancing, leaders, tables and title blocks), design intent and layout, user interface customization, file management, and plotting/printing. Topics are covered in a sequential and progressive manner with explanations of application to industry practices and standards.

DT 102   AutoCAD II   (3)
1½ hours lecture - 4½ hours laboratory
Prerequisite: *A minimum grade of 'C' in DT/ENGR 101*
Note: *Cross listed as ENGR 102.*
Transfer acceptability: *CSU; UC – DT 101 and 102 combined: maximum credit, one course*
Advanced AutoCAD furthers the student's understanding of drafting and design, and builds upon the concepts introduced in AutoCAD I. Students will learn advanced design and modeling techniques to create more complex parts in 2D and 3D spaces not easily achieved with the basic commands. Drawing and design concepts will continue to be developing, using more advanced techniques and transition into 3D modeling of wireframes, surfaces, meshes and solids. Models will be assigned material and rendered in to photorealistic presentation. Lab exercises reinforce these learned concepts, while incorporating industry "best practices".

DT 103   SolidWorks I   (3)
1½ hours lecture - 4½ hours laboratory
Note: *Cross listed as ENGR 103; Graded only*
Transfer acceptability: *CSU*
SolidWorks is a computer-aided design (CAD) software used for parametric feature-based solid modeling, assembly construction, technical drawing creation, finite element analysis (FEA) and motion simulation. This class introduces students to the concept of parametric modeling, and how if differs from direct modeling while exploring and applying design intent and design elements. Lecture topics cover elements starting with basic core features of all parts, continuing with building simple assemblies of those parts, and culminating with creating both detail part and assembly production-ready drawings. Lab exercises reinforce these learned concepts, all while incorporating industry "best practices". The class is intended for students with no previous 3D modeling application experience, but is also well-suited for students that may have experience with other 3D CAD applications.

DT 104   SolidWorks II   (3)
1½ hours lecture - 4½ hours laboratory
Prerequisite: *A minimum grade of 'C' in DT/ENGR 103*
Note: *Cross listed as ENGR 104; Graded only*
Transfer acceptability: *CSU*
SolidWorks is a computer-aided design (CAD) software used for parametric feature-based solid modeling, assembly construction, technical drawing creation, finite element analysis (FEA) and motion simulation. This class furthers the student's understanding of parametric 3D design, and builds upon the concepts introduced in SolidWorks I. Students will learn advanced modeling techniques to create more complex parts incorporating organic shapes not easily achieved with the basic core features. Advanced assemblies will now be constructed using joint connections between components, constituting a basic mechanism. The student will perform kinematic (motion) studies using these mechanized assemblies to analyze the feasibility of the design. Large assembly management techniques will be taught. Drawing and design concepts will continue to be developed, using more advanced methods. Lab exercises reinforce these learned concepts, all while incorporating industry "best practices."

DT 110   Technical Drafting I with AutoCAD   (3)
1½ hours lecture - 4½ hours laboratory
Prerequisite: *A minimum grade of 'C' in DT/ENGR 101, or concurrent enrollment in DT/ENGR 101*
Transfer acceptability: *CSU*
Note: *Cross listed as ENGR 110.*
Fundamentals of drafting including lettering, sketching, geometric constructions, orthographic projections, basic dimensioning, sectional views and auxiliary views. Drafting will be performed on the computer using AutoCAD, SolidWORKS, and Creo software.

DT 111   Technical Drafting II with AutoCAD   (3)
1½ hours lecture - 4½ hours laboratory
Prerequisite: *A minimum grade of 'C' in DT/ENGR 110*
Note: *Cross listed as ENGR 111.*
Transfer acceptability: *CSU*
Advanced drafting practices using customized AutoCAD software. Basic studies will include pictorial drafting, descriptive geometry, and revolutions. Working/shop drawings in topography, developments, cabinet/millwork, structural steel, and welding will be performed. Emphasis is placed on increased productivity by customizing AutoCAD to the student's requirements.

DT 113   Solid Modeling for Engineering I   (3)
1½ hours lecture - 4½ hours laboratory
Note: *Cross listed as ENGR 113*
Transfer acceptability: *CSU; UC*
Solid modeling, assemblies and drawings using Creo and SolidWorks.

DT 114   Creo I   (3)
1½ hours lecture - 4½ hours laboratory
Transfer acceptability: *CSU*
Creo Parametric 3D is a computer-aided design (CAD) software used for parametric feature-based solid modeling, assembly construction, technical drawing creation, and finite element analysis (FEA) and motion simulation. This class introduces students to the concept of parametric modeling, and how if differs from direct modeling while exploring and applying design intent and design elements. Lecture topics cover elements starting with basic core features of all parts, continuing with building simple assemblies of those parts, and culminating with creating both detail part and assembly production-ready drawings. Lab exercises reinforce these learned concepts, all while incorporating industry "best practices." The class is intended for students with no previous 3D modeling application experience, but is also well-suited for students that may have experience with other 3D CAD applications.

DT 115   Creo II   **(3)**
1½ hour lecture - 4½ hours laboratory
Prerequisite: *:A minimum grade of 'C' in DT 114*
Transfer acceptability: *CSU*
Creo Parametric 3D is a computer-aided design (CAD) software used for parametric feature-based solid modeling, assembly construction, technical drawing creation, finite element analysis (FEA) and motion simulation. This class furthers the student's understanding of parametric 3D design, and builds upon the concepts introduced in Creo I. Students will learn advanced modeling techniques to create more complex parts incorporating organic shapes not easily achieved with the basic core features. Advanced assemblies will now be constructed using joint connections between components, constituting a basic mechanism. The student will perform kinematic (motion) studies using these mechanized assemblies to analyze the feasibility of the design. Large assembly management techniques will be taught. Drawing and design concepts will continue to be developed, using more advanced methods. Lab exercises reinforce these learned concepts, all while incorporating industry "best practices."

**DT 117   Blueprint Reading and Geometric Dimensioning
               and Tolerance**   **(3)**
1½ hour lecture - 4½ hours laboratory
Note: *Cross listed as ENGR/WELD 117*
Transfer acceptability: *CSU*
The Blueprint Reading and Geometric Dimensioning and Tolerancing class will provide students with the ability to read and interpret blueprints. Students will learn Geometric Dimensioning and Tolerancing (GD&T) to identify, use appropriate geometric symbols and techniques of geometric dimension, used for industrial quality drawings. Students will also learn to verify geometric dimensions and tolerances of manufactured items.

DT 190   CNC Machining MasterCam I   **(3)**
1½ hours lecture - 4½ hours laboratory
Note: *Cross listed as ENGR 190/MACH 190/WELD 190*
This course will introduce the student to CNC Machining on mills and lathes. Learn how to set-up and operate machines using G-Code and MasterCAM to manufacture parts and projects. Students will receive instructions and drawings of parts requiring 2- or 3-axis machining. Students will set-up, operate, and run parts on a variety of CNC Equipment.

DT 196   Special Problems in Computer Aided Drafting   (1, 2, 3)
3, 6, or 9 hours laboratory
Transfer acceptability: *CSU*
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 and/or laboratory may be scheduled by the department. Refer to Class Schedule.
Transfer acceptability: *CSU*
Topics in Drafting. See class schedule for specific topic covered. Course title will designate subject covered.

DT 225   Exploring Robotics and Electrical Circuits   **(3)**
1½ hours lecture - 4½ hours laboratory
Transfer acceptability: *CSU*
Exploring Robotic and Electrical Circuits is an introduction to concepts dealing with a broad range of topics including basic electronic components and equipment will be presented in an integrated approach at a hands-on level. An electronic prototyping platform will be utilized along with a variety of electronic components in order to introduce students to robotics. This course will allow students to achieve a basic foundation and skill set to be used in the field of circuit board layout, automation, and electronic design.

DT 226   Printed Circuit Board Design   **(3)**
1½ hours lecture - 4½ hours laboratory
Note: *Cross listed as as ENGR 226*
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 227   Advanced Printed Circuit Board Design   **(3)**
1½ hours lecture - 4½ hours laboratory
Prerequisite: *A minimum grade of 'C' in DT/ENGR 226*
Note: *Cross listed as as ENGR 227*
Transfer acceptability: *CSU*
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.

Earth Sciences (ES)

Contact the Earth, Space, and Environmental Sciences Department for further information.
760-744-1150, ext. 2512
Office: NS-110

COURSE OFFERINGS

**ES 100   The Earth as a System: Case Studies
               of Change in Space and Time**   **(3)**
3 hours lecture
Transfer acceptability: *CSU; UC*
C-ID GEOL 120
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 100L   Earth Systems Laboratory   **(1)**
3 hours laboratory
Prerequisite: *Completion of, or concurrent enrollment in ES 100*
Transfer acceptability: *CSU; UC*
C-ID GEOL 120L
Laboratory and field investigations of the Earth as a system including the geosphere, atmosphere, hydrosphere, and exosphere (solar system) as well as an assessment of society's role in Earth's processes. Focuses on the physical and chemical systems of the Earth such as the tectonic cycle, rock cycle, hydrologic cycle, weather, and climate.

ES 115   Natural Disasters and Environmental Hazards   **(3)**
3 hours lecture
Note: *Cross listed as GEOG 115*
Transfer acceptability: *CSU; UC*
Examination and analysis of natural disasters and environmental hazards including earthquakes, tsunamis, volcanic activity, hurricanes, flooding, air and water polution, and global climate change.

Economics (ECON)

Contact the Economics, History and Political Science Department for further information.
760-744-1150, ext. 2412
Office: MD-375
Associate Degree, Certificate of Achievement and Certificate of Proficiency requirements are listed in Section 6 (green pages).
For transfer information, consult a Palomar College Counselor.

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
Prerequisite: *A minimum grade of 'C' in MATH 56, or MATH 60, or eligibility determined through the math placement process.*
Transfer acceptability: *CSU; UC*
C-ID ECON 202
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, specifically fiscal and monetary policies, money and banking, economic growth, and analysis of global issues.

ECON 102   Principles of Economics (Micro)   (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*
C-ID ECON 201
Analyzes decision-making of individuals and groups as it relates to economic behavior. Examines market structures and resource markets under varying degrees of competition. Investigates causes of market failures such as public goods and externalities. 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 social market economies. The theories will be applied to the study of several countries, including the former 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 120   Environmental Economics   (3)
3 hours lecture
Transfer acceptability: *CSU; UC*
A study of major environmental issues from an economics perspective. Models will be developed and used to explore case studies on issues and policies. A strong emphasis will be placed on resource management problems. Course will provide a rationale for government involvement in the market-based economy.

ECON 125   Introduction to Labor Studies   (3)
3 hours lecture
Transfer acceptability: *CSU; UC*
An introduction to Labor Studies. The focus is on how fundamental work is to human relations and the creation of communities. Moreover, the course examines how work, workers and organizations and institutions shape and define the employment relationship. Surveys how class, race, ethnicity, and gender impact work; the role of corporations; the role of unions; the global economy, and the future of work.

ECON 295   Directed Study in Economics   (1, 2, 3)
1, 2, or 3 hours lecture
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.

Emergency Medical Education (EME)

Contact the Emergency Medical Education Department for further information.
760-744-1150, ext. 8150
Office: ESC-808
Associate Degree, Certificate of Achievement and Certificate of Proficiency requirements are listed in Section 6 (green pages).

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 40.5 units for 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 7 units for former EMT B training, which is equal to the number of units given at Palomar College for the EMT B courses.
3. The student may not receive duplicate credit for any other EMT B or EMT P courses.

Degree Requirements
The Associate in Science 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 Science 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 Science 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, ext. 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.

COURSE OFFERINGS

Courses numbered under 100 are not intended for transfer credit.
EME courses may not be taken as an audit.

EME 100   Emergency Medical Responder   (3)
3 hours lecture
Note: *Cross listed as HE 104*
Transfer acceptability: *CSU; UC*
C-ID KINE 101
Covers national curriculum for Emergency Medical Responder (EMR) training.
Includes the study and application of emergency medical skills and procedures,
including basic anatomy and physiology, terminology, and prevention of disease
transmission. CPR certification from the American Heart Association.

EME 105   EMT Prep   (4)
3 hours lecture – 3 hours laboratory
Transfer acceptability: *CSU*
This course is the mandatory prerequisite for EME 106/106L and is designed
to prepare the student for the EMT course (EME 106/106L) by exposing them
to basic anatomy, physiology, pathophysiology, medical terminology and basic
assessment techniques to recognize and treat a patient experiencing a medical
emergency.

EME 106   Emergency Medical Technician (Lecture)   (6)
6 hours lecture
Prerequisite: *Current American Heart Association CPR for BLS Provider or American
Red Cross for the Health Care Provider., EME 100 and must be age 18 by the first
day of class.*
Corequisite: *EME 106L*
Note: *May not be taken for Pass/No Pass grading*
Transfer acceptability: *CSU*
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 certification.

EME 106L   Emergency Medical Technician Skills (Laboratory) (1.5)
4½ hours laboratory
Prerequisite: *Current American Heart Association CPR for BLS Provider or American
Red Cross for the Health Care Provider Certification, must be age 18 on the first day
of EME 106., EME 100*
Corequisite: *EME 106*
Note: *Pass/No Pass grading only*
Transfer acceptability: *CSU*
Application of skills required for treatment of pre-hospital emergencies. This
course prepares the student for National Registry, California and San Diego
County EMT certification. Student is required to complete 24 hours supervised
ambulance and emergency department observation.

EME 116 Paramedic Preparation (1.5)
1½ hours lecture
Prerequisite: *Possess a valid current EMT-B, EMT-II or EMT-P certificate, or have
possessed one within the last two years.*
Transfer acceptability: *CSU*
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   (3)
3 hours lecture
Prerequisite: *Current EMT with a minimum of 3 months full time pre-hospital
experience*
Corequisite: *EME 175L*
Transfer acceptability: *CSU*
This class is designed as a bridge to assist currently practicing prehosptial
healthcare providers who are planning on applying to the paramedic program.
Anatomy, physiology, medical math, pharmacology, and cardiology will be
explored. The students will also be exposed to an overview of paramedic-level
assessments, skills, and treatment.

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: *Grade/Pass/No Pass*
Transfer acceptability: *CSU*
Overview of EMT skills combined with appropriate paramedic-level assessment
and treatment relevant to the disease process studied.

EME 206   Introduction to Paramedic Training (Lecture)   (5.5)
5½ hours lecture
Prerequisite: *Admission into Paramedic program*
Corequisite: *EME 206L*
Transfer acceptability: *CSU*
Introduction to paramedic training which meets the requirements of the
National Educational Standards for Paramedic Training.

**EME 206L   Introduction to Paramedic Training
                 (Laboratory)   (1.5)**
4½ hours laboratory
Prerequisite: *Admission into Paramedic program*
Corequisite: *EME 206*
Note: *Pass/No Pass grading only*
Transfer acceptability: *CSU*
Application of skills necessary for the Introduction to Paramedic Training which
meets the requirements of the National Educational Standards for Paramedic
Training.

EME 207   Paramedic Medical Training (Lecture)   (10)
10 hours lecture
Prerequisite: *Admission into Paramedic program*
Corequisite: *EME 207L and EME 211*
Transfer acceptability: *CSU*
The study of medical and cardiac diseases for paramedic training which meets
the requirements of the National Educational Standards for Paramedic Training.
Includes Advanced Cardiac Life Support training and certification.

EME 207L   Paramedic Medical Skills (Laboratory)   (2)
6 hours laboratory
Prerequisite: *Admission into Paramedic program*
Corequisite: *EME 207*
Note: *Pass/No Pass grading only*
Transfer acceptability: *CSU*
Application of skills necessary for the medical portion of paramedic training
which meets the requirements of the National Educational Standards for
Paramedic Training. Includes Advanced Cardiac Life Support training and
certification.

EME 208   Paramedic Trauma Training (Lecture)   (4.5)
4½ hours lecture
Prerequisite: *Admission into Paramedic program*
Corequisite: *EME 208L and EME 211*
Transfer acceptability: *CSU*
The study of traumatic emergencies for paramedic training which meets the
requirements of the National Educational Standards for Paramedic Training.
Includes Pre-hospital Trauma Life Support training and certification.

EME 208L   Trauma Skills (Laboratory)   (1)
3 hours laboratory
Prerequisite: *Admission into Paramedic program*
Corequisite: *EME 208*
Note: *Pass/No Pass grading only*
Transfer acceptability: *CSU*
Application of skills necessary for trauma portion of paramedic training which
meets the requirements of the National Educational Standards for Paramedic
Training. Includes Pre-hospital Trauma Life Support training and certification.

**EME 209   Paramedic Obstetrical and Pediatric
            Training (Lecture)   (2.5)**
2½ hours lecture
Prerequisite: *Admission into Paramedic program*
Corequisite: *EME 209L and EME 212*
Transfer acceptability: *CSU*
The study of Obstetrical and Pediatric emergencies for paramedic training which meets the requirements of the National Educational Standards for Paramedic Training. Includes Pediatric Education for Pre-hospital Professionals training and certification.

**EME 209L   Paramedic Obstetrical and Pediatric
            Skills (Laboratory)   (1)**
3 hours laboratory
Prerequisite: *Admission into Paramedic program*
Corequisite: *EME 209 and EME 212*
Note: *Pass/No Pass grading only*
Transfer acceptability: *CSU*
Application of skills necessary for the Obstetrical and Pediatric portion for paramedic training which meets the requirements of the National Educational Standards for Paramedic Training. Includes Pediatric Education for Pre-hospital Professionals training and certification.

EME 210   Hospital Clinical Experience   (3.5)
12 hours laboratory
Prerequisite: *EME 209*
Transfer acceptability: *CSU*
Supervised clinical experience in acute care areas of hospitals where knowledge of advanced life support techniques is necessary.

EME 211   Clinical Integration I   (1, 1.5)
3 - 4½ hours laboratory
Corequisite: *EME 207 and EME 207L*
Note: *Pass/No Pass grading only*
Transfer acceptability: *CSU*
Application of assessment and BLS skills necessary to be successful in paramedic training.

EME 212   Clinical Integration II   (1.5, 2)
4½ - 6 hours laboratory
Corequisite: *EME 208 and EME 208L, EME 209 and EME 209L and EME 210*
Note: *Pass/No Pass grading only*
Transfer acceptability: *CSU*
Application of assessment and BLS skills necessary to be successful in paramedic training.

EME 215   Field Internship   (10)
30 hours laboratory
Prerequisite: *A minimum grade of 'B' in EME 210; or concurrent enrollment in EME 210*
Transfer acceptability: *CSU*
Assignment to a response vehicle with a field preceptor. Includes direct patient care responsibilities in providing advanced life support.

EME 220   Paramedic Refresher A   (4)
2 hours lecture - 6 hours laboratory
Note: *Only open to students who have been accepted into the Paramedic Program as a challenge or who were unsuccessful in EME 208/208L, EME 209/209L, EME 210 or EME 215 and require remediation. Student who were unsuccessful must interview and be accepted into EME 220.*
Transfer acceptability: *CSU*
Provides students who were unsuccessful in 207/207L, EME 210 and/or EME 215 or individuals who are challenging the paramedic program an opportunity to refresh, strengthen, and maintain their clinical abilities and knowledge base.

EME 221   Paramedic Refresher B   (4.5)
2 hours lecture - 7½ hours laboratory
Provides students who were unsuccessful in 208/208L, EME 209/209L, EME 210 and/or EME 215 or who are challenging the paramedic program an opportunity to refresh, strengthen, and maintain their clinical abilities and knowledge base.

EME 224   Clinical Refresher   (1)
3 hours laboratory
Note: *Only open to students who have been accepted into the Paramedic Program as a challenge and received a passing grade in EME 221 or who were unsuccessful in EME 210 or EME 215 and have received a passing grade in EME 220 and EME 221.*
Transfer acceptability: *CSU*
Provides students who were unsuccessful in EME 215 or who are challenging the paramedic program an opportunity to refresh, strengthen, and maintain their clinical abilities and knowledge base.

**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*
Transfer acceptability: *CSU*
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
Office: NS-355B
Associate Degree, Certificate of Achievement and Certificate of Proficiency requirements are listed in Section 6 (green pages).

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 101   AutoCAD Introduction to
            Computer Aided Drafting   (3)**
1½ hours lecture - 4½ hours laboratory
Note: *Cross listed as DT 101.*
Transfer acceptability: *CSU; UC – DT/ENGR 101 and 102 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.

ENGR 102 AutoCAD II (3)
1½ hours lecture - 4½ hours laboratory
Prerequisite: *A minimum grade of 'C' in DT/ENGR 101*
Note: *Cross listed as DT 102.*
Transfer acceptability: *CSU; UC – DT 101 and 102 combined: maximum credit, one course*
Advanced AutoCAD furthers the student's understanding of drafting and design, and builds upon the concepts introduced in AutoCAD I. Students will learn advanced design and modeling techniques to create more complex parts in 2D and 3D spaces not easily achieved with the basic commands. Drawing and design concepts will continue to be developing, using more advanced techniques and transition into 3D modeling of wireframes, surfaces, meshes and solids. Models will be assigned material and rendered in to photorealistic presentation. Lab exercises reinforce these learned concepts, while incorporating industry "best practices".

ENGR 103 SolidWorks I (3)
1½ hours lecture - 4½ hours laboratory
Note: *Cross listed as DT 103; Graded only*
Transfer acceptability: *CSU*
SolidWorks is a computer-aided design (CAD) software used for parametric feature-based solid modeling, assembly construction, technical drawing creation, finite element analysis (FEA) and motion simulation. This class introduces students to the concept of parametric modeling, and how if differs from direct modeling while exploring and applying design intent and design elements. Lecture topics cover elements starting with basic core features of all parts, continuing with building simple assemblies of those parts, and culminating with creating both detail part and assembly production-ready drawings. Lab exercises reinforce these learned concepts, all while incorporating industry "best practices". The class is intended for students with no previous 3D modeling application experience, but is also well-suited for students that may have experience with other 3D CAD applications.

ENGR 104 SolidWorks II (3)
1½ hours lecture - 4½ hours laboratory
Prerequisite: *A minimum grade of 'C' in DT/ENGR 103*
Note: *Cross listed as DT 104; Graded only*
Transfer acceptability: *CSU*
SolidWorks is a computer-aided design (CAD) software used for parametric feature-based solid modeling, assembly construction, technical drawing creation, finite element analysis (FEA) and motion simulation. This class furthers the student's understanding of parametric 3D design, and builds upon the concepts introduced in SolidWorks I. Students will learn advanced modeling techniques to create more complex parts incorporating organic shapes not easily achieved with the basic core features. Advanced assemblies will now be constructed using joint connections between components, constituting a basic mechanism. The student will perform kinematic (motion) studies using these mechanized assemblies to analyze the feasibility of the design. Large assembly management techniques will be taught. Drawing and design concepts will continue to be developed, using more advanced methods. Lab exercises reinforce these learned concepts, all while incorporating industry "best practices."

ENGR 110 Technical Drafting I with AutoCAD (3)
1½ hours lecture - 4½ hours laboratory
Prerequisite: *A minimum grade of 'C' in DT/ENGR 101, or concurrent enrollment in DT/ENGR 101*
Note: *Cross listed as DT 110.*
Transfer acceptability: *CSU*
Fundamentals of drafting including lettering, sketching, geometric constructions, orthographic projections, basic dimensioning, sectional views and auxiliary views. Drafting will be performed on the computer using AutoCAD, SolidWORKS, and Creo software.

ENGR 111 Technical Drafting II with AutoCAD (3)
1½ hours lecture - 4½ hours laboratory
Prerequisite: *A minimum grade of 'C' in DT/ENGR 110*
Note: *Cross listed as DT 111.*
Transfer acceptability: *CSU*
Advanced drafting practices using customized AutoCAD software. Basic studies will include pictorial drafting, descriptive geometry, and revolutions. Working/shop drawings in topography, developments, cabinet/millwork, structural steel, and welding will be performed. Emphasis is placed on increased productivity by customizing AutoCAD to the student's requirements.

ENGR 113 Solid Modeling for Engineering I (3)
1½ hours lecture - 4½ hours laboratory
Note: *Cross listed as DT 113*
Transfer acceptability: *CSU; UC*
Solid modeling, assemblies and drawings using Creo and SolidWorks.

ENGR 117 Blueprint Reading and Geometric Dimensioning and Tolerance (3)
1½ hour lecture - 4½ hours laboratory
Note: *Cross listed as DT/WELD 117*
Transfer acceptability: *CSU*
The Blueprint Reading and Geometric Dimensioning and Tolerancing class will provide students with the ability to read and interpret blueprints. Students will learn Geometric Dimensioning and Tolerancing (GD&T) to identify, use appropriate geometric symbols and techniques of geometric dimension, used for industrial quality drawings. Students will also learn to verify geometric dimensions and tolerances of manufactured items.

ENGR 126 Introduction to Electrical and Computer Engineering (4)
3 hours lecture - 3 hours laboratory
Prerequisite: *A minimum grade of 'C' in MATH 140*
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 190 CNC Machining MasterCam I (3)
1½ hours lecture - 4½ hours laboratory
Note: *Cross listed as DT 190/MACH 190/WELD 190*
This course will introduce the student to CNC Machining on mills and lathes. Learn how to set-up and operate machines using G-Code and MasterCAM to manufacture parts and projects. Students will receive instructions and drawings of parts requiring 2- or 3-axis machining. Students will set-up, operate, and run parts on a variety of CNC Equipment.

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 lecture and/or laboratory may be scheduled by the department. Refer to Class Schedule.
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: *A minimum grade of 'C' in ENGR 210L and PHYS 231, or concurrent enrollment in ENGR 210L and PHYS 231*
Transfer acceptability: *CSU; UC*
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: *A minimum grade of 'C' in ENGR 210, 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 226   Printed Circuit Board Design   (3)
1½ hours lecture - 4½ hours laboratory
Note: *Cross listed as as DT 226*
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.

ENGR 227   Advanced Printed Circuit Board Design   (3)
1½ hours lecture - 4½ hours laboratory
Prerequisite: *A minimum grade of 'C' in DT/ENGR 226*
Note: *Cross listed as as DT 227*
Transfer acceptability: *CSU*
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.

ENGR 235   Engineering Mechanics – Statics   (3)
3 hours lecture
Prerequisite: *A minimum grade of 'C' in PHYS 230 and MATH 140*
Transfer acceptability: *CSU; UC*
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: *A minimum grade of 'C' in 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   (4)
3 hours lecture - 3 hours laboratory
Prerequisite: *A minimum grade of 'C' in CHEM 110 and 110L*
Transfer acceptability: *CSU,UC*
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*
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
Office: H-302B
Associate Degree, Certificate of Achievement and Certificate of Proficiency requirements are listed in Section 6 (green pages).
Associate Degrees for transfer IGETC and CSUGE requirements are listed in Section 7 (green pages).

COURSE OFFERINGS

Any student wishing to earn an A.A. degree must complete ENG 100 with a grade of 'C' or better. Multiple Measures will indicate whether the student is eligible for: English 100W (ENG 100 plus English 49, taken at the same time); ENG 100; or ENG 202 or 203. For more information about recommended placement in English Composition courses, please contact the Assessment Center, (760) 744-1150, ext. 2476.

Please note: Students whose first language is not English may want to register for ESL instruction prior to taking English 100 or English 100W. The ESL placement process will determine which ESL classes are appropriate. Students may take one or more ESL classes prior to English 100 including transferrable ESL courses such as ESL 101-103 and accelerated courses ESL 105 & 106. Non-resident international students may be required to take one or more of these English as a Second Language courses. Please contact the ESL Department at (760) 744-1150, ext. 2280.

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

ENG 10   English Essentials   (4)
4 hours lecture
Note: *A grade of 'C' or better is required for eligibility for ENG 50*
Non-degree Applicable
Offers basic instruction in grammar, usage, mechanics, sentence structure, and paragraph and essay development.

ENG 49   Reading and Writing for College Composition   (2)
2 hours lecture
Corequisite: *ENG 100*
This course offers support for students enrolled in English 100. Instruction will cover academic reading, reasoning, and writing expected for transfer and associate-degree courses. Students will read a variety of texts, review rules of grammar and essay form, and practice essay-writing

ENG 50   Introductory Composition   (4)
4 hours lecture
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 50A   Preparation for College Composition   (6)
6 hours lecture
Accelerated preparation for English Composition (ENG 100), this course offers intensive instruction in the academic reading, reasoning, and writing expected for transfer and associate-degree courses. Students will read college-level texts, review rules of grammar and essay form, and practice essay-writing.

ENG 97   English Topics   (1-4)
Units awarded in topics courses are dependent upon the number of lecture hours required of the student. Refer to Class Schedule.
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 Pass/No Pass grading*
Transfer acceptability: *CSU; UC*
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 135   Introduction to Creative Writing   (4)
4 hours lecture
Prerequisite: *"A minimum grade of 'C' in ENG 100, or eligibility determined through the English placement process.*
Transfer acceptability: *CSU; UC*
C-ID ENGL 200
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: *"A minimum grade of 'C' in ENG 100, or eligibility determined through the English placement process.*
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)
2 hours lecture - 6 hours laboratory
Prerequisite: *"A minimum grade of 'C' in ENG 100, or eligibility determined through the English placement process.*
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
Prerequisite: *"A minimum grade of 'C' in ENG 100, or eligibility determined through the English placement process.*
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   (1-4)
Units awarded in topics courses are dependent upon the number of lecture hours required of the student. Refer to Class Schedule.
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 Pass/No Pass grading*
Transfer acceptability: *CSU; UC*
C-ID ENGL 105
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 Pass/No Pass grading*
Transfer acceptability: *CSU; UC*
C-ID ENGL 110
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 advocation of ideas; methods of research; advanced elements of style and organization.

ENG 205   Introduction to Literature   (3)
3 hours lecture
Prerequisite: *A minimum grade of 'C' in ENG 100*
Transfer acceptability: *CSU; UC*
C-ID ENGL 120
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: *"A minimum grade of 'C' in ENG 100, or eligibility determined through the English placement process.*
Transfer acceptability: *CSU; UC*
C-ID ENGL 160
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 the historical and cultural contexts of the literary texts.

ENG 211   Survey of British Literature II   (3)
3 hours lecture
Prerequisite: *"A minimum grade of 'C' in ENG 100, or eligibility determined through the English placement process.*
Transfer acceptability: *CSU; UC*
C-ID ENGL 165
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: *"A minimum grade of 'C' in ENG 100, or eligibility determined through the English placement process.*
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: *"A minimum grade of 'C' in ENG 100, or eligibility determined through the English placement process.*
Transfer acceptability: *CSU; UC*
C-ID ENGL 140
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: _"A minimum grade of 'C' in ENG 100, or eligibility determined through the English placement process._
Transfer acceptability: _CSU; UC_
C-ID ENGL 145
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: _"A minimum grade of 'C' in ENG 100, or eligibility determined through the English placement process._
Transfer acceptability: _CSU; UC_
C-ID ENGL 130
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: _"A minimum grade of 'C' in ENG 100, or eligibility determined through the English placement process._
Transfer acceptability: _CSU; UC_
C-ID ENGL 135
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: _"A minimum grade of 'C' in ENG 100, or eligibility determined through the English placement process._
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 245   Survey of Biblical Literature   (3)
3 hours lecture
Prerequisite: _"A minimum grade of 'C' in ENG 100, or eligibility determined through the English placement process._
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: _"A minimum grade of 'C' in ENG 100, or eligibility determined through the English placement process._
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: _"A minimum grade of 'C' in ENG 100, or eligibility determined through the English placement process._
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: _"A minimum grade of 'C' in ENG 100, or eligibility determined through the English placement process._
Transfer acceptability: _CSU; UC_
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: _"A minimum grade of 'C' in ENG 100, or eligibility determined through the English placement process._
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: _"A minimum grade of 'C' in ENG 100, or eligibility determined through the English placement process._
Transfer acceptability: _CSU; UC_
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: _"A minimum grade of 'C' in ENG 100, or eligibility determined through the English placement process._
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: _"A minimum grade of 'C' in ENG 100, or eligibility determined through the English placement process._
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.

English as a Second Language (ESL)

Contact the English as a Second Language Department for further information.
760-744-1150, ext. 2272
Office: H-116

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 a placement process given by the English as a Second Language Department before enrolling in English or English as a Second Language classes. The placement process will determine which classes are 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 9   English Pronunciation I   (3)
3 hours lecture
Non-degree Applicable
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
Non-degree Applicable
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 12   ESL Grammar Skills I   (3)
3 hours lecture
Non-degree Applicable
Instruction in editing of written material by applying conventions of standard written English.

ESL 13   ESL Grammar Skills II   (3)
3 hours lecture
Non-degree Applicable
Instruction in editing of written material by applying conventions of standard written English.

ESL 14   ESL Grammar Skills III   (3)
3 hours lecture
Non-degree Applicable
Instruction in editing of written material by applying conventions of standard written English.

ESL 20   Academic Speaking and Listening   (3)
3 hours lecture
Non-degree Applicable
Develops speaking and listening skills necessary for non-native speakers of English to be successful in the college environment. This class emphasizes linguistic and interpersonal skills in order for participation in discussions and performance of tasks in personal, academic, and formal or informal situations. Vocabulary, conversation strategies, presentation techniques, and strategies for notetaking and listening for main ideas and details are introduced within interesting and meaningful contexts.

**ESL 31   Writing Support for the Sciences for
Non-Native Speakers   (1)**
1 hour lecture
Provides instruction and practice with written rhetorical models prevalent across the sciences curricula (Life Sciences, Earth Sciences, Behavioral Sciences, Social Sciences, etc.). Focus on instruction and practice with essay types and other writing that enrolled students need for their current science courses.

ESL 45   Reading and Writing Essentials I   (5)
5 hours lecture
Non-degree Applicable
A beginning course in reading and writing academic English for students whose first language is not English. Offers instruction in reading skills, basic grammar usage, paragraph organization and development, and appropriate basic vocabulary for academic reading and writing.

ESL 55   Reading and Writing Essentials II   (5)
5 hours lecture
Prerequisite: *A minimum grade of 'C' in ESL 45, or eligibility determined through the English as a Second Language placement process*
An intermediate course in reading and writing academic English for students whose language is not English. Introduces analytical skills and critical thinking through reading, word level, and sentence level grammar as it applies to academic writing, paragraph organization and development, and appropriate vocabulary for academic writing.

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 and/or laboratory may be scheduled by the department. Refer to Class Schedule.
Topics in English as a Second Language. See Class Schedule for specific topic covered. Course title will designate subject covered.

ESL 95 English as a Second Language Support   (1-4)
1 – 4 hours lecture
An intermediate course in reading and writing academic English for students whose language is not English. Introduces analytical skills and critical thinking through reading, word level, and sentence level grammar as it applies to academic writing, paragraph organization and development, and appropriate vocabulary for academic writing.

ESL 98.1   Career Track ESL I   (2,2.5,3,3.5,4,4.5,5)
2, 2½, 3, 3½, 4, 4½, or 5 hours lecture
First level English as a Second Language instruction in preparation for entrance into a career, certificate, or degree program. Self-paced modules provide an introduction to complementary language and academic skills necessary to succeed in a career/technical program. Includes reading, writing, speaking, listening, and basic computer literacy skills.

ESL 98.2   Career Track ESL II   (2,2.5,3,3.5,4,4.5,5)
2, 2½, 3, 3½, 4, 4½, or 5 hours lecture
Prerequisite: *A minimum grade of 'C' in 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 101   Written Communication I   (5)
5 hours lecture
Prerequisite: *A minimum grade of 'C' in ESL 55, or 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: *ESL 101 or ESL 105 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*
This course features practice in essay development using appropriate vocabulary and source support. It introduces writing as a response to published materials. Topics include writing as a process, essay organization, rhetorical strategies, research strategies, and reading strategies. Readings from culturally diverse traditions provide exposure to a range of genres and a broader cultural understanding of the world.

ESL 103 Written Communication III (5)
5 hours lecture
Prerequisite: *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*
This course provides practice in essay writing based on analytical reading and critical thinking. Topics include writing as a process, organization and development, rhetorical strategies, research strategies, synthesis of sources to support a writing topic, and critical reading. Readings from culturally diverse traditions provide exposure to a range of genres and a broader cultural understanding of the world.

ESL 105 Accelerated Written Communication I (6)
6 hours lecture
Prerequisite: *ESL 45, or Eligibility determined through the English as a Second Language placement process.*
Transfer acceptability: *CSU; UC*
An accelerated course in reading and writing combining ESL 55 and 101. Designed for students whose first language is not English. Emphasizes analytical and critical thinking skills through reading and writing as a process. Reviews sentence-level grammar and its application to academic writing of summaries and development of paragraph organization and multiple-paragraph essays.

ESL 106 Accelerated Written Communication II (6)
6 hours lecture
Prerequisite: *ESL 105, or ESL 101 or eligibility determined through the English as a Second Language placement process.*
Transfer acceptability: *CSU; UC*
An accelerated course in reading and writing designed for non-native speakers of English. This course features practice in essay development using appropriate vocabulary and source support. It develops students' abilities to critically analyze and respond both objectively and subjectively to published materials from culturally diverse traditions. Topics include writing as a process, essay organization, rhetorical strategies, research strategies, synthesis of sources to support a writing topic, and critical reading. Readings provide exposure to a range of genres and a broader cultural understanding of the world.

ESL 110 College Composition for Non-Native Speakers (4)
4 hours lecture
Prerequisite: *A minimum grade of 'C' in ESL 103 or 106,, or eligibility determined through the English as a Second Language placement process*
Transfer acceptability: *CSU/UC*
An introduction to college-level written English for non-native speakers of English. This course emphasizes critical reading, critical thinking, expository and argumentative writing, and library research techniques. This course includes a close examination of a variety of texts from culturally diverse traditions. Instruction leverages students' native languages and cultures to inform their college-level reading and writing.

Entertainment Technology (ENTT)

Contact the Performing Arts Department for further information.
760-744-1150, ext. 2316
Office: PAC-122
Associate Degree, Certificate of Achievement and Certificate of Proficiency requirements are listed in Section 6 (green pages).

COURSE OFFERINGS

Individual courses are not repeatable. State Regulations (Title 5, Sections 55040-55041) also limit the number of times a student may take courses with related content and similar primary educational activities. Therefore, some combinations of course work in Entertainment Technology have limitations on the number of times a student may enroll. Specific information about enrollment limitations for Entertainment Technology classes is available at http://www.palomar.edu/schedule/restrictions.htm

ENTT 106A Basic Costume I: Technology (3)
2 hours lecture –3 hours laboratory
Note: *Cross listed as FASH 106A and TA 106A*
Transfer acceptability: *CSU; UC*
C-ID THTR 174
A foundational course providing a basic introduction to practices, theories, techniques and procedures of costume technology for theatre, film and television. Focus will be on the structure of a working costume shop, basic hand and machine sewing techniques, textile identification, basic garment fitting, simple pattern modification, and production wardrobe crew procedures. Practical training in college productions is incorporated during the course of study.

ENTT 107 Lighting for Stage and Television (3)
2 hours lecture - 3 hours laboratory
Note: *Cross listed as TA 107*
Transfer acceptability: *CSU; UC*
C-ID THTR 173
Techniques, theories, and procedures necessary to develop lighting and lighting effects integrated into film, television, and theatre productions. Practical experience in college productions.

ENTT 108 Stagecraft and Scene Design for Theatre and Television (3)
2 hours lecture - 3 hours laboratory
Note: *Cross listed as TA 108*
Transfer acceptability: *CSU; UC*
C-ID THTR 172
Technical practices and organization of production for theatre, film, and television. Practice in drafting, designing, and construction of scenery for college productions.

ENTT 114 Advanced Sound Reinforcement (1.5 - 2)
4½ - 6 hours laboratory
Note: *Cross listed as MUS/TA 114*
Transfer acceptability: *CSU*
Advanced principles of electronic sound, acoustics, equalization and effects processing, recording of live sound in a concert or theatrical setting, equipment management and design techniques.

ENTT 120 Digital Television Production (3)
1½ hours lecture - 4½ hours laboratory
Note: *Cross listed as DBA 120; may not be taken for Pass/No Pass grading*
Transfer acceptability: *CSU*
The terminology, practices, and aesthetic considerations of visual and sound productions. Principles of producing, staging, shot composition, directing, blocking, graphics, studio techniques, and lighting for television.

ENTT 130　Radio Production　　　　(3)
1½ hours lecture - 4½ hours laboratory
Note: *Cross listed as DBA 130; may not be taken for Pass/No Pass grading*
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. A program produced by the student will be broadcast on radio station KKSM.

ENTT 298C　Advanced Broadcast Internships　　　　(3)
9 hours laboratory
Prerequisite: *A minimum grade of 'C' in DBA 298B*
Note: *Cross listed as DBA 298C; may not be taken for Pass/No Pass grading*
Transfer acceptability: *CSU*
Work on advanced television production including individual research, work on advanced college produced programs, or internships at local Network affiliate broadcast stations, radio stations, cable companies, and other professional communications facilities.

Family and Consumer Sciences (FCS)

Contact the Design and Manufacturing Technologies Department for further information.
760-744-1150, ext. 2349
Office: P-8A

COURSE OFFERINGS

FCS 110　Microbiology and Foods　　　　(3)
2 hours lecture - 3 hours laboratory
Note: *Cross listed as BIOL 108*
Transfer acceptability: *CSU*
Introduction to the principles of microbiology with an emphasis on foodborne pathogens. Students will explore biological factors and controls relating to reproduction of microorganisms and the effects on public health. This course does not meet microbiology requirement for pre-health students.

FCS 136　Money Management and Planning for the Future　　(3)
3 hours lecture
Note: *Cross listed as BUS 136*
Transfer acceptability: *CSU/UC*
An integrated approach to personal finance that focuses on practical financial decision-making, as well as the physiological, psychological and sociological contexts in which those decisions are made. Topics include money management, taxes, financial services, consumer credit, consumer purchasing strategies, housing, property and automobile insurance, health and disability insurance, life insurance, investment analysis and retirement and estate planning.

Fashion (FASH)

Contact the Design and Manufacturing Technologies Department for further information.
760-744-1150, ext. 2349
Office: DR-5

Associate Degree, Certificate of Achievement and Certificate of Proficiency requirements are listed in Section 6 (green pages).
For transfer information, consult a Palomar College Counselor.

COURSE OFFERINGS

Courses numbered under 100 are not intended for transfer credit.

FASH 70　Fashion Knits　　　　(.5)
1½ hours laboratory
This workshop offers the students the knowledge and process of designing, draping and flat pattern making as it applies to knit fabrics. They will also learn the characteristics of knit fabrication and it's appropriate applications. Sewing and construction techniques will focus on knit fabrics.

FASH 90　Design Collection　　　　(3)
1½ hours lecture - 4½ hours laboratory
Recommended preparation: *At least one of the following courses: FASH 135, 136, 139, 145*
Lab course for fashion show line designers in any clothing category of women's, men's, teen's, and children's wear.

FASH 100　Fashion Industry　　　　(3)
3 hours lecture
Transfer acceptability: *CSU*
The Fashion Industry course introduces students to the dynamic world of fashion merchandising and design. Topics include fashion icons, the design process, creative development, textiles, visual merchandising, industry terminology, career building and the impact of globalization.

FASH 105　Fashion Analysis and Clothing Selection　　(3)
3 hours lecture
Transfer acceptability: *CSU*
Examines fashion for professional and personal need as it relates to culture, wardrobe planning, and coordination.

FASH 106A　Basic Costume I: Technology　　　　(3)
2 hours lecture - 3 hours laboratory
Note: *Cross listed as TA 106A and ENTT 106A*
Transfer acceptability: *CSU; UC*
C-ID FASH 174
A foundational course providing a basic introduction to practices, theories, techniques and procedures of costume technology for theatre, film and television. Focus will be on the structure of a working costume shop, basic hand and machine sewing techniques, textile identification, basic garment fitting, simple pattern modification, and production wardrobe crew procedures. Practical training in college productions is incorporated during the course of study.

FASH 109　Elementary Stage Make-Up　　　　(3)
2 hours lecture - 4 hours laboratory
Note: *Cross listed as TA 109*
Transfer acceptability: *CSU; UC*
C-ID FASH 175
Basic theories, techniques, and procedures of make-up production for stage, film, and television. Practical training in college productions.

FASH 110　Textiles　　　　(3)
2½ hours lecture - 1½ hours laboratory
Transfer acceptability: *CSU*
Fibers, yarn, fabric construction, and finishes as related to selection, use, and care of textiles.

FASH 115　Visual Merchandising I　　　　(3)
3 hours lecture
Transfer acceptability: *CSU*
Designed to acquaint the student with basic techniques of effective retail store presentations including window and interior displays. Course activities include constructing and installing visual displays using the principles of design and designing store environments, utilizing fixtures, lighting, and other display materials.

FASH 116　Visual Merchandising II　　　　(3)
3 hours lecture
Prerequisite: *A minimum grade of 'C' in FASH 115*
Transfer acceptability: *CSU*
Advanced training in visual presentation. Students benefit by practical application and collaboration with industry professionals. Course activities include a leadership role in construction and installing of interior and exterior window displays, store layout, special event coordination, and store planning.

FASH 119   Fashion Buying/Management I   (3)
3 hours lecture
Transfer acceptability: CSU
A study of management opportunities within the field of fashion retailing, at both the corporate and store level, with an emphasis on the role of store department management. The role and responsibilities of each management position will be fully explored, including fiscal responsibilities of each and the math skills necessary to accomplish goals. Topics covered include basic management skills, inventory control, labor laws governing the fashion retail industry, recruitment and interviewing, employee relations, including coaching and counseling, math skills pertinent to each position, and merchandise management and control.

FASH 120   Fashion Buying/Management II   (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   (3)
3 hour lecture
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
Note: Cross listed as TA 131
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 135   Introductory Sewing for Apparel   (3)
2 hours lecture - 3 hours laboratory
Transfer acceptability: CSU
Produce basic garments in a sample-room setting using introductory sewing techniques.

FASH 136   Advanced Sewing for Apparel   (3)
1½ hours lecture - 4½ hours laboratory
Prerequisite: A minimum grade of 'C' in FASH 135
Transfer acceptability: CSU
Advanced sewing for apparel emphasizing machine technique and workroom procedures. Preparation will be given for employment in sample making for apparel manufacturing.

FASH 138   Speed Tailoring Jacket Techniques   (1)
3 hours laboratory
Transfer acceptability: CSU
Speed Tailoring will focus on advanced construction techniques and materials used to change a flat piece of fabric into a three-dimensional garment. Industry technique application of interfacings, using garment appropriate fabrics, advanced construction skills and professional pressing equipment will be used to create a speed tailored garment equivalent to high-end ready-to-wear.

FASH 139   Pattern Making/Fashion Design   (3)
2 hours lecture - 3 hours laboratory
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/Draping   (3)
1½ hours lecture - 4½ hours laboratory
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)
1½ hours lecture - 4½ hours 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 148   Digital Design for Fashion   (3)
2 hours lecture - 3 hours laboratory
Transfer acceptability: CSU
Design and illustrate fashion sketches, storyboards, and patterns using Adobe Illustrator and Adobe Photoshop. Development of individual skills and style in graphic presentations.

FASH 149   Fine Dressmaking   (3)
1½ hours lecture - 4½ hours laboratory
Prerequisite: A minimum grade of 'C' in FASH 136
Transfer acceptability: CSU
A study of techniques used to develop fine dressmaking skills including construction used in high-end ready to wear and couture fashions.

FASH 155   World of Fashion   (2,3)
1, 2, or 3 hours lecture - 1½, 2, 3, or 4½ laboratory
Note: Fee charged
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 156   Fashion Trade Show   (1.5)
½ hour lecture - 1 hour laboratory
Transfer acceptability: CSU
This course is a field study of the fashion industry. Emphasis is placed on field trip outings to a variety of fashion industry markets and trade shows. This course is designed for students interested in fashion and business and those who wish to explore the resources available for designers, retailers buyers, manufacturers and social media influencers.

FASH 175   Analysis, Evaluation, and Comparison
**   of Ready-to-Wear   (3)**
3 hours lecture
Transfer acceptability: CSU
Analysis of the quality of materials, design, and construction in ready-to-wear garments and accessories; comparison of processes involved in manufacturing; concepts of sizing; principles of fit; and aids in buying and selling.

FASH 180   Design Studio I:Fundamentals   (.5)
1½ hours laboratory
Transfer acceptability: *CSU*
Introductory apparel sewing techniques in a lab setting. A continuation of Intro Sewing and 2D Pattern-making courses, this course introduces fashion design students to the basic principles and techniques of sewing, cutting, construction, and finishing and further develops students' understanding of fundamental apparel construction procedures and their application to current trends.

FASH 181   Design Studio II: Intermediate   (.5)
1½ hours laboratory
Transfer acceptability: *CSU*
This course introduces students to the construction techniques involved in the development of intimate apparel products. Students create a prototype from a sloper, using professional sewing methods and application techniques. Emphasis on proportion, balance and shape as related to design aesthetics broadens students' understanding of actualizing and realizing three-dimensional design prototypes through manipulating soft fabrications.

FASH 182   Design Studio III:Advanced   (.5)
1½ hours laboratory
Transfer acceptability: *CSU*
Creative interpretation and artistic development of contemporary apparel designs. Emphasis on proportion, balance, and shape. The students' understanding of actualizing and realizing three-dimensional design prototypes through manipulating soft fabrications. Students learn how to hand bead as well as apply rocailles, sequins, pearls, and faux gems on different types of fabrics.

FASH 183   Design Studio IV: Professional   (.5)
1½ hours laboratory
Transfer acceptability: *CSU*
Enhancement of sewing skills, patternmaking and or computer application, 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 195   Field Studies in Fashion   (2)
1 hour lecture - 3 hours laboratory
Transfer acceptability: *CSU*
Fashion industry on site: process of designing, manufacturing, marketing, and merchandising of fashion apparel and related accessories.

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 and/or laboratory may be scheduled by the department. Refer to Class Schedule.
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 and/or laboratory may be scheduled by the department. Refer to Class Schedule.
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 and/or laboratory may be scheduled by the department. Refer to Class Schedule.
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*
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.

Fire Technology (FIRE)

Contact Public Safety Programs for further information.
760-744-1150, ext. 1704
Office: PSTC, 182 Santar Place, San Marcos
Associate Degree, Certificate of Achievement and Certificate of Proficiency requirements are listed in Section 6 (green pages).

COURSE OFFERINGS

Due to safety concerns, as well as minimum requirements by regulatory agencies, potential students should be aware that some courses may require participants to demonstrate physically demanding skills, along with both verbal and nonverbal communication skills.

Courses numbered under 100 are not intended for transfer credit.

FIRE 51   Fire Academy Preparation   (3)
2 hours lecture - 3 hours laboratory
Note: *May not be taken as an audit*
Prepares individuals for the demanding requirements of the Fire Academy. Also prepares students for the Physical Ability test required to pass the North County Regional Fire Test. The test is broken 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: *Pass/No Pass grading only; may not be taken as an audit*
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: *Pass/No Pass grading only; may not be taken as an audit*
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   Firefighter Skill Maintenance and Update   (1.5)
4½ hours laboratory
Prerequisite: *Must have completed an accredited Firefighter 1 Academy or Must have completed an approved internal Fire Department training program that follow State Fire Training 2013 standards for Firefighter 1*
Note: *Pass/No Pass grading only; may not be taken as an audit*
This course is designed for currently employed and volunteer Firefighters and covers fire service topics in a classroom and manipulative setting that includes required skills maintenance and updated tactical techniques. All subjects relate to the duties and responsibilities of the fire services in order to maintain a state of readiness. Course may be repeated to cover legally mandated training and new techniques.

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 101   Firefighter Safety   (3)
3 hours lecture
Transfer acceptability: CSU
Encompasses the many dangers associated with the job of a firefighter. Introduces the National Fallen Firefighters Foundation, Firefighter Life Safety Initiatives, and the Everyone Goes Home Program.

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   (3)
3 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.

FIRE 120   Building Construction for Fire Protection   (3)
3 hours lecture
Transfer acceptability: CSU
The study of the components of building construction that relate to fire/life safety. The development and evolution of building and fire codes will be studied in relationship to past fires/collapses in residential, commercial, and industrial occupancies.

FIRE 125   Fire Apparatus and Equipment   (3)
3 hours lecture
Transfer acceptability: CSU
Driving laws, driving technique, construction and operation of pumping engines, ladder trucks, aerial platforms, specialized equipment, and apparatus maintenance.

FIRE 130   Fire Protection Equipment and Systems   (3)
3 hours lecture
Transfer acceptability: CSU
Provides information relating to the features of design and operation of fire detection and alarm systems, heat and smoke control systems, special protection and sprinkler systems, water supply for fire protection, and portable fire extinguishers.

FIRE 131   Introduction to Emergency Management   (3)
3 hours lecture
Transfer acceptability: CSU
This course introduces students to the emergency management profession. Topics include the history of emergency management, the identification and assessment of hazards, risk, and vulnerability, and the four phases of emergency management (mitigation, preparedness, response, and recovery). Special emphasis is given to the communication function, international disaster management, and the recent influence of the terrorism hazard. The course concludes with a discussion on the future of emergency management.

FIRE 132   Disaster Response and Recovery   (3)
3 hours lecture
Transfer acceptability: CSU
This course will present the principles that promote effective disaster response and recovery operations after disasters. The course will examine the nature of disasters as well as the roles and responsibilities of various actors involved in emergency management. The importance of addressing the needs of the affected population will be discussed, and will include recommendations to fulfill a variety of important functions (e.g. implementing the emergency operations plan, warning, evacuation, search and rescue, emergency medical care/ mass casualties, mass fatalities, sheltering and care, donations management, damage assessment, the disaster declaration process, media relations/public information, individual and public assistance). The role of technology and the importance of communications and coordination will be emphasized along with the incident command system, emergency operations centers, the National Incident Management System and the National Response Plan.

FIRE 133   Disaster Mitigation   (3)
3 hours lecture
Transfer acceptability: CSU
This course explores the disaster mitigation and preparedness frameworks involving private and governmental agencies, the rules and regulations governing mitigation and preparedness, the risk assessment process, and strategies, tools and techniques that are available to prevent or lessen the impact of hazards. Knowledge and skills required to develop programs to reduce losses from future emergencies caused by natural and man-made disasters.

FIRE 142   Fire Ethics   (3)
3 hours lecture
Transfer acceptability: CSU
Fire ethics will be studied from the perspective of a professional firefighter. Students will examine and explore ethical and moral dilemmas that will confront Firefighters/EMS personnel throughout their career.

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   (20)
10 hours lecture - 30 hours laboratory
Prerequisite: *A minimum grade of 'C' in EME 106 or certification as an EMT 1, and admission to the Fire Fighter I Academy program*
Transfer acceptability: CSU
A 656 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 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
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 171A   Company Officer 2A/Human
Resource Management for Company Officers   (2.5)
2½ hours lecture
Prerequisite: *Meet the educational requirements for Fire Fighter II or experience as a career or volunteer firefighter.*
Transfer acceptability: *CSU*
This course provides information on the use of human resources to accomplish assignments, evaluating member performance, supervising personnel, integrating health and safety plans, policies, and procedures into daily activities as well as the emergency scene.

FIRE 171B   Company Officer 2B/General Administrative
Functions for Company Officers   (1)
1 hour lecture
Prerequisite: *Meet the educational requirements for Fire Fighter II or equivalent.*
Transfer acceptability: *CSU (pending)*
This course provides information on general administrative functions and the implementation of department policies and procedures and addresses conveying the fire department's role, image, and mission to the public.

FIRE 171C   Company Officer 2C/Fire Inspections
and Investigations for Company Officers   (2.5)
2½ hours lecture
Prerequisite: *Completion of a CA Regionally accredited Fire Academy or a signed statement by the agency's Fire Chief or designee stating the sponsored student has completed all SFT training requirements and skills sheets for Firefighter 1 or equivalent.*
Transfer acceptability: *CSU*
This course provides information on conducting inspections, identifying hazards and addressing violations, performing a fire investigation to determine preliminary cause and securing the incident scene and preserving evidence. Applies to California State Fire Marshal Company Officer Certification.

FIRE 171D   Company Officer 2D/All Risk   (2.5)
2½ hours lecture
Prerequisite: *Completion of the following: ICS-200.B: Incident Command System for Single Resources and Initial Action Incidents and Hazardous Material Incident Commander (as offered by the California Specialized Training Institute)*
Transfer acceptability: *CSU*
This course provides information on conducting incident size-up, developing and implementing an initial plan of action involving single and multi-unit operations for various types of emergency incidents to mitigate the situation following safety procedures, conducting pre-incident planning, and develop and conduct a post-incident analysis.

FIRE 171E   Company Officer 2E/
Wildland Incident Operations   (2.5)
2½ hours lecture
Prerequisite: *S-290 Intermediate Fire Behavior (Classroom Delivery Only)*
Transfer acceptability: *CSU*
This course provides information on evaluating and reporting incident conditions, analyzing incident needs, developing and implementing a plan of action to deploy incident resources to complete all operations to suppress a wildland fire, establish an incident command post, creating an incident action plan, and completing incident records and reports. Applies to California State Fire Marshal Company Officer Certification - additional materials fee required.

FIRE 172A   Instructor 1 / Instructional Methodology   (2.5)
2½ hours lecture
Prerequisite: *Introduction to the Incident Command System (IS-100.B) or National Incident Management System (IS-700.A).*
Transfer acceptability: *CSU*
This course provides the skills and knowledge needed for the entry level professional instructor to perform his or her duties safely, effectively, and competently. The curriculum is based on the 2012 edition of NFPA 1041 Standard for Fire Service Instructor Professional Qualifications. At the end of this course, candidates for Instructor 1 certification will be able to teach and deliver instruction from a prepared lesson plan utilizing instructional aids and evaluation instruments. The Instructor 1 will also be able to adapt a lesson plan and complete the reporting requirements to the local jurisdiction.

FIRE 173   Legal Aspects of Emergency Services   (3)
3 hours lecture
Course will address the federal, state, and local laws that regulate emergency services and include a review of national standards, regulations and consensus standards.

FIRE 180   Fire Prevention 1A   (2.5)
2½ hours lecture
Transfer acceptability: *CSU*
A broad, technical overview of fire prevention codes and ordinances, inspection practices, and key hazards.

FIRE 181   Fire Prevention 1B   (2.5)
2½ hours lecture
Transfer acceptability: *CSU*
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 194   Fire Instructor 1B   (2.5)
2½ hours lecture
Transfer acceptability: *CSU*
The second in a two-course series. Topics include preparing course outlines, establishing levels of instruction, constructing behavioral objectives and lesson plans, developing instructional aids, fundamentals of testing and measurements, test planning, evaluation techniques and tools. Student teaching demonstrations are required of all.

FIRE 197A   Fire Technology General Topics   (.5-5)
Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture and/or laboratory may be scheduled by the department. Refer to Class Schedule.
Transfer acceptability: *CSU*
Topics in Fire technology General. See Class Schedule for specific topic offered. Course title will designate subject covered.

FIRE 197B   Fire Technology Command Topics   (.5-5)
Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture and/or laboratory may be scheduled by the department. Refer to Class Schedule.
Transfer acceptability: *CSU*
Topics in Fire Technology Command. See Class Schedule for specific topic offered. Course title will designate subject covered.

FIRE 197C   Fire Technology Field Topics   (.5-5)
Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture and/or laboratory may be scheduled by the department. Refer to Class Schedule.
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

Contact the World Languages Department for further information about the Foreign Languages Topic courses.
760-744-1150, ext. 2390
Office: H-201
Contact the American Indian Studies Department for further information about the Cahuilla, Cupeño, Luiseno and Nahuatl courses.
760-744-1150, ext. 2405
Office: MD-140

COURSE OFFERINGS

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 and/or laboratory may be scheduled by the department. Refer to Class Schedule.
Transfer acceptability: CSU
Topics in Foreign Languages. See Class Schedule for specific topic offered. Course title will designate subject covered.

French (FREN)

Contact the World Languages Department for further information.
760-744-1150, ext. 2390
Office: H-201
Associate Degree, Certificate of Achievement and Certificate of Proficiency requirements are listed in Section 6 (green pages).

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
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 102   French II   (5)
5 hours lecture - 1 hour laboratory
Prerequisite: A minimum grade of 'C' in FREN 101 or two years of high school French
Transfer acceptability: CSU; UC
This course is the second semester of French. This elementary level course is a study of the French language and French-speaking cultures, with continued emphasis on the development of communicative skills and basic structures. Course combines in-class instruction with self-paced study in the Foreign Language Laboratory.

FREN 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 and/or laboratory may be scheduled by the department. Refer to Class Schedule.
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 - 1 hour laboratory
Prerequisite: A minimum grade of 'C' in FREN 102 or three years of high school French
Transfer acceptability: CSU; UC
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. Course combines in-class instruction with self-paced study in the World Languages Laboratory. Class is largely conducted in French.

FREN 202   French IV   (5)
5 hours lecture
Prerequisite: A minimum grade of 'C' in FREN 201 or four years of high school French
Transfer acceptability: CSU; UC
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.

General Studies

Contact the Counseling Center for further information.
760-744-1150, ext. 2179
Office: SSC-18A
Associate Degree, Certificate of Achievement and Certificate of Proficiency requirements are listed in Section 6 (green pages).

Geography (GEOG)

Contact the Earth, Space, and Environmental Sciences Department for further information.
760-744-1150, ext. 2512
Office: NS-110
Associate Degree, Certificate of Achievement and Certificate of Proficiency requirements are listed in Section 6 (green pages).
Associate Degrees for transfer IGETC and CSUGE requirements are listed in Section 7 (green pages).

COURSE OFFERINGS

**GEOG 100   Earth's Dynamic Environment:
     Introduction to Physical Geography   (3)**
3 hours lecture
Transfer acceptability: CSU; UC
C-ID GEOG 110
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   Earth's Dynamic Environment:
                 Physical Geography Lab   **(1)**
3 hours laboratory
Prerequisite: *A minimum grade of 'C' in GEOG 100, or concurrent enrollment in GEOG 100*
Transfer acceptability: *CSU; UC*
C-ID GEOG 111
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*
C-ID GEOG 125
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   People and the Environment:
                 Introduction to Human Geography   **(3)**
3 hours lecture
Transfer acceptability: *CSU; UC*
C-ID GEOG 120
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*
C-ID GEOG 130
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
Note: *Cross listed as ES 115*
Transfer acceptability: *CSU; UC*
Examination and analysis of natural disasters and environmental hazards including earthquakes, tsunamis, volcanic activity, hurricanes, climate change, flooding, mass movement, wildfire, and impacts with space objects.

GEOG 120   Digital Earth: Introduction to
                 Geographic Information Systems   **(4)**
3 hours lecture - 3 hours laboratory
Transfer acceptability: *CSU; UC*
C-ID GEOG 155
An introduction to the mapping sciences with a primary focus on Geographic Information Systems (GIS). Covers 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 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 Geography   **(3)**
3 hours lecture
Transfer acceptability: *CSU; UC*
C-ID GEOG 140
Emphasizes issues, processes and topics relevant to both the physical and cultural geography of California and the landscapes that have evolved as a result of that interface. Topics include but are not limited to climate, landforms, vegetation, water resources, ethnic diversity, urban and agricultural regions, and the economy.

GEOG 132   Database Management and Data Acquisition   **(4)**
4 hours lecture
Prerequisite: *A minimum grade of 'C' in GEOG 120, 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 and Programming   **(2)**
1 hour lecture - 3 hours laboratory
Prerequisite: *A minimum grade of 'C' in GEOG 120*
Transfer acceptability: *CSU*
Provides advanced knowledge and practical experience in developing and customizing Geographic Information Systems (GIS) desktop and web applications. Students will learn the fundamentals of the Python scripting language, as well as the use of models and custom scripts. The lab activities will work with script tools, introductory web mapping interface, and modelbuilder.

GEOG 136   Intermediate ArcGIS: GIS Analysis   **(2)**
1 hour lecture - 3 hours laboratory
Prerequisite: *A minimum grade of 'C' in GEOG 120*
Transfer acceptability: *CSU*
Focus on performing complex operations using the ArcGIS software. Students will gain hands-on experience in advanced querying operations, Spatial Analyst and Network Analyst, coordinate geometry, ArcGIS ModelBuilder, and the application of ArcGIS in a variety of disciplines.

GEOG 138   GIS Internship   **(2)**
6 hours laboratory
Prerequisite: *A minimum grade of 'C' in 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 140   Introduction to Remote Sensing and
                 Drone Data Processing   **(3)**
1 hour lecture
Transfer acceptability: *CSU*
Provides students with a basic understanding of theories and techniques used in the processing and analysis of satellite and drone (i.e. Unmanned aircraft systems) data. Topics include image and sensor characteristics, information derived from satellite and drone data , and image interpretation and analysis.

GEOG 142   Environmental Applications of GIS   **(1)**
1 hour lecture
Prerequisite: *A minimum grade of 'C' in GEOG 120*
Transfer acceptability: *CSU*
Provides students with knowledge and practical experience in the application of GIS in an environmental setting. We will explore how location-based GIS tools are used in many areas of environmental management such as natural disasters, biodiversity, water resources, and pollution. Case studies will be used to explore and understand how GIS is being used to help preserve the earth's resources and environment.

**GEOG 143   Introduction to Cartography and
              Computer Mapping   (1)**
1 hour lecture
Prerequisite: *A minimum grade of 'C' in GEOG 120*
Transfer acceptability: *CSU; UC*
Provides the technical and design skills needed to create an effective map using Geographic Information Systems (GIS). Students will receive a review on map projection, coordinate systems, and datum transformation issues. In addition, students will learn about map templates, map annotations, and other tools that are used to enhance spatial data presentation.

GEOG 144   Internet Mapping and Application Development   (3)
2½ hours lecture - 1½ hours laboratory
Prerequisite: *A minimum grade of 'C' in GEOG 120*
Transfer acceptability: *CSU*
Involves the design, creation, configuration, and optimization of geospatial services and applications to deliver content across the Internet. The student will construct web mapping applications with a variety of user interfaces.

GEOG 145   LiDAR Data Processing and GIS Integration   (1)
1 hour lecture
Transfer acceptability: *CSU*
This course will introduce students to basic concepts in Light Detection and Ranging (LiDAR). Students will also learn to process LiDAR data collected by unmanned aircraft systems (UAS), and analysis these data using Geographic Information Systems (GIS).

**GEOG 150   Geographic Information
              Science and Spatial Reasoning   (3)**
3 hours lecture
Prerequisite: *A minimum grade of 'C' in MATH 60*
Transfer acceptability: *CSU; UC*
An introduction to spatial analyses and spatial distribution theories within the field of Geographic Information Science (GISci). Students will learn about fundamentals of cartography, GIS theory, global positioning systems, spatial relationships, and remote sensing in this course. Students will analyze environmental problems and the human landscape by using open-source GIS software packages to visualize, query, manipulate, and interpret temporal and spatial data.

**GEOG 158   Small Unmanned Aircraft Systems
              Procedures and Regulations   (1)**
1 hour lecture
Note: *Cross listed as GEOL 158 and GCIP 158*
Transfer acceptability: *CSU*
This course will equip students with knowledge about the regulations and procedures governing the safe and legal operation of small unmanned aircraft systems (sUAS), commonly referred to as "drones". The scope of this course coincides with the knowledge areas in the Federal Aviation Administration's Part 107 airman knowledge test for a Remote Pilot Certificate with a sUAS rating, and is intended to prepare students who wish to become commercial sUAS pilots for the knowledge test.

GEOG 195   Regional Field Studies in Geography   (1, 2, 3)
½, 1, or 1½ hours lecture - 1½, 2, 2½, 3, 3½, 4, or 4½ hours laboratory
Transfer acceptability: *CSU; UC – Credit determined by UC upon review of course syllabus.*
C-ID GEOG 160
Extended field studies of the geography of selected regions. Emphasis upon field observation and interpretation of climate, meteorology, vegetation, soils, and landforms.

GEOG 197   Geography Topics   (1 - 4)
1- 4 hours lecture - 3 - 12 hours laboratory
Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture and/or laboratory may be scheduled by the department. Refer to Class Schedule.
Note: *Graded only*
Transfer acceptability: *CSU*
Topics in Geology. See Class Schedule for specific topic offered. Course title will designate subject covered.

GEOG 295   Directed Study in Geography   (1, 2, 3)
3, 6, or 9 hours laboratory
Prerequisite: *Approval of project or research by instructor*
Transfer acceptability: *CSU; UC – Credit determined by UC upon review of course syllabus.*
C-ID GEOG 160
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, Space, and Environmental Sciences Department for further information.
760-744-1150, ext. 2512
Office: NS-110
Associate Degree, Certificate of Achievement and Certificate of Proficiency requirements are listed in Section 6 (green pages).
Associate Degrees for transfer IGETC and CSUGE requirements are listed in Section 7 (green pages).

COURSE OFFERINGS

GEOL 100   Physical Geology   (3)
3 hours lecture
Note: *Together with GEOL 150, a prerequisite to upper division courses in Geology*
Transfer acceptability: *CSU; UC*
C-ID GEOL 100
Geology is the study of Earth and the processes that shape the world around us. Geologic concepts and principles provide a framework for understanding the dynamics of Earth?s interconnected cycles and processes. Topics covered will include: The origin and composition of the earth, formation and classification of minerals and rocks, tectonic processes, concept of geologic time, geologic processes that shape Earth?s landscape, and the influence of geology on society.

GEOL 100L   Geology Laboratory   (1)
3 hours laboratory
Prerequisite: *A minimum grade of 'C' in GEOL 100, or concurrent enrollment in GEOL 100*
Note: *May be offered as a field laboratory; satisfies lab requirement in Physical Science*
Transfer acceptability: *CSU; UC*
C-ID GEOL 100L
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   (3)
3 hours lecture
Note: *Cross listed as ASTR 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.

GEOL 150   Dinosaurs and Earth History   (3)
3 hours lecture
Prerequisite: A minimum grade of 'C' in GEOL 100
Transfer acceptability: CSU; UC
C-ID GEOL 110
Principles of historical geology. The origin and evolution of Earth and its biosphere, incorporating global tectonics, stratigraphy, fossils, biological evolution, geologic dating, and the processes that have influenced paleogeography during the past 4.6 billion years. Together with GEOL 100, a prerequisite to upper division courses in geology.

GEOL 150L   Dinosaurs and Earth History Laboratory   (1)
3 hours laboratory
Prerequisite: A minimum grade of 'C' in GEOL 150, or concurrent enrollment in GEOL 150
Transfer acceptability: CSU; UC
C-ID GEOL 110L
Lab component exploring the principles of historical geology. Activities investigate the origin and evolution of Earth and its biosphere, global tectonics, stratigraphy, fossils, biological evolution, geologic dating, and the processes that have influenced paleogeography during the past 4.6 billion years.

GEOL 158   Small Unmanned Aircraft Systems
                    Procedures and Regulations   (1)
1 hour lecture
Note: Cross listed as GEOG 158 and GCIP 158
Transfer acceptability: CSU
This course will equip students with knowledge about the regulations and procedures governing the safe and legal operation of small unmanned aircraft systems (sUAS), commonly referred to as "drones". The scope of this course coincides with the knowledge areas in the Federal Aviation Administration's Part 107 airman knowledge test for a Remote Pilot Certificate with a sUAS rating, and is intended to prepare students who wish to become commercial sUAS pilots for the knowledge test.

GEOL 195A   Regional Field Studies in
                      Geology: Regional   (1, 1.5, 2, 2.5, 3)
½ - 1½ hours lecture - 1½ - 4½ hours laboratory
Prerequisite: A minimum grade of 'C' in GEOL 100 and110
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. Locations will not duplicate those specified in Geology 195B through 195F. Localities visited may vary from year to year.

GEOL 195B   Field Studies in Geology:
                      Southern California Coastal Region   (1-3)
½ - 1½ hours lecture - 1½ - 4½ hours laboratory
Prerequisite: GEOL 100, or GEOL 110
Transfer acceptability: CSU; UC – Credit determined by UC upon review of course syllabus.
Extended field studies of the geologic processes that shape the coastal region of Southern California. Emphasis on coastal processes and landforms, oceanographic climate, geologic development of the Continental Borderland and Transverse Ranges, formation and development of oil and gas resources, coastal sediment resource management, geologic hazards and human impacts in the coastal zone.

GEOL 195C   Field Studies in Geology: Salton Trough Region   (1-3)
½ - 1½ hours lecture - 1½ - 4½ hours laboratory
Prerequisite: GEOL 100, or GEOL 110
Transfer acceptability: CSU; UC – Credit determined by UC upon review of course syllabus.
Extended field studies of the geologic processes that shape the Salton Trough region of Southern California. Emphasis on the active plate boundary zone, including opening of the Gulf of California and development of the San Andreas Fault system. Specific topics include tectonic-related landforms, earthquake dynamics and history, stratigraphy, evolution of Cenozoic climate and fauna, geothermal resources, and Salton Sea history and environmental management.

GEOL 195D   Field Studies in Geology: Colorado Plateau Region   (1-3)
½ - 1½ hours lecture - 1½ - 4½ hours laboratory
Prerequisite: GEOL 100, or GEOL 110
Transfer acceptability: CSU; UC – Credit determined by UC upon review of course syllabus.
Extended field studies of the geologic processes that shape the Colorado Plateau region. Emphasis on stratigraphy and paleogeography, development and hydrology of the Colorado River system, erosional landforms, fossil and mineral resources, regional structural deformation, igneous and volcanic history, and relationship to the ancestral and modern Rocky Mountains.

GEOL 195E   Field Studies in Geology: Sierra Nevada Region   (1-3)
½ - 1½ hours lecture - 1½ - 4½ hours laboratory
Prerequisite: GEOL 100, or GEOL 110
Transfer acceptability: CSU; UC – Credit determined by UC upon review of course syllabus.
Extended field studies of the geologic processes and landscape evolution of the Sierra Nevada region. Emphasis on Pleistocene glacial history and glacial landforms, subduction zone processes including pluton emplacement and terrane docking history, Long Valley-Inyo Craters volcanic history, gold mineralization and mining history, regional fault systems, volcanism and uplift of the modern Sierra Nevada range.

GEOL 195F   Field Studies in Geology: Death Valley Region   (1-3)
½ - 1½ hours lecture - 1½ - 4½ hours laboratory
Prerequisite: GEOL 100, or GEOL 110
Transfer acceptability: CSU; UC – Credit determined by UC upon review of course syllabus.
Extended field studies of the geologic processes that shape the Death Valley region. Emphasis on the tectonic evolution of the Death Valley and the Basin and Range province, depositional history of stratigraphic units from Proterozoic through Paleozoic, volcanic history, mineral and mining resources, structural landforms including the extensive faulting and folding, water resources, and climate history and development of desert landforms.

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 and/or laboratory may be scheduled by the department. Refer to Class Schedule.
Note: Graded only
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: A minimum grade of 'C' in GEOL 150
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 World Languages Department for further information.
760-744-1150, ext. 2390
Office: H-201

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*
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 through listening, speaking, reading and writing. Course combines in-class instruction and practice with self-paced study in the World Languages Resource Center. No previous experience in German is required.

GERM 102   German II   (5)
5 hours lecture - 1 hour laboratory
Prerequisite: *A minimum grade of 'C' in GERM 101 or two years of high school German*
Transfer acceptability: *CSU; UC*
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 through listening, speaking, reading and writing. Course combines in-class instruction and practice with self-paced study in the World Languages Resource Center.

GERM 201   German III   (5)
5 hours lecture - 1 hour laboratory
Prerequisite: *A minimum grade of 'C' in GERM 102 or three years of high school German*
Transfer acceptability: *CSU; UC*
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 the intermediate level structures and readings of culturally relevant materials. Emphasis is on developing oral, listening, reading and writing skills in order to acquire proficiency in German. Course combines in-class instruction with self-paced study in the World Languages Resource Center. Class is largely conducted in German.

GERM 202   German IV   (5)
5 hours lecture
Prerequisite: *A minimum grade of 'C' in German 201 or four years of high school German*
Transfer acceptability: *CSU; UC*
This course is the fourth semester of German. It is a continued study of the German language and German-speaking cultures, focusing on the refined use of intermediate-level structures and readings of culturally relevant authentic materials. Emphasis is on the expansion of cross-cultural awareness, as well as the development of language skills in order to acquire communicative competence in German. The course teaches culture and facilitates language acquisition through listening, speaking, reading and writing. Students interact with more sophisticated and more varied authentic language in context. Class is conducted in German.

GERM 225   German Reading and Conversation   (3)
3 hours lecture
Prerequisite: *GERM 102*
Transfer acceptability: *CSU; UC*
An intermediate-level study of the German language and culture. Focus is on spoken language with readings of cultural material serving as a basis for discussion. Course is taught in German.

Graphic Communications (GC)

See also Graphic Communications - Imaging & Publishing, and Graphic Communications - Multimedia & Web

Contact the Graphic Communications Department for further information.
760-744-1150, ext. 2452
Office: MD-114
For transfer information, consult a Palomar College Counselor.

COURSE OFFERINGS

GC 100   Graphic Communications   (3)
3 hours lecture
Transfer acceptability: *CSU*
Explores the history and theory of effective mass communication from prehistoric cave art, to invention of the printing press, and modern graphic communication techniques using computers and the Internet. The class examines communication models revolving around imagery, type, delivery systems, and technology. The students will be able to understand and establish the effects of a clear visual message. Learning modules include slideshow, field trips, guest speakers, discussion, lectures and hands-on application with computers and the Internet to promote an understanding of graphic communications and visual messages and their impact on society.

GC 101   History of Graphic Communications   (3)
3 hours lecture
Transfer acceptability: *CSU*
This course focuses on the history and evolution of graphic communications from prehistoric pictographs to present day graphic design. Topics include the invention of writing and the creation of alphabets. Other topics include world influences on print and aesthetic design, and an understanding of the stylistic, social, political, economic, and historical events as related to communication and graphic design. The emphasis is on art movements, schools of thought, influential individuals, and technology as they interrelate with the history of graphic arts. Historical topics are applied to photography, print media graphics and motion graphics. Field trips to museums and guest speakers will be integrated into the topics as appropriate.

GC 102   History of the Book and Publishing:
Papyrus to Pixels   (3)
3 hours lecture
Transfer acceptability: *CSU; UC*
A foundational course that explores the history and development of the book, printing, and publishing. Also explores their correlation with advancement of society, civilization, and the dissemination of information, including the history of the printing press, typesetting, papermaking, print technology and bindery.

GC 115   Graphics and Media: A Multicultural Perspective   (3)
3 hours lecture
Transfer acceptability: *CSU; UC*
An introduction to the impact of media technology on the visual arts from a multicultural perspective. Includes print, Internet, multimedia, and game design. Embraces the diversity and multicultural perspectives that reflect American demographics by presenting individual and collaborative contributions as well as strategies for designing niche marketing and advertising graphics for a multicultural society. Addresses the impact of globalization. Examines gender, ethnicity (African American, American Indian, Asian-Americans and/or Pacific Islanders, and Mexican American in particular), age, sexual orientation, and universal access for people with impairments.

Graphic Communications - Imaging and Publishing (GCIP)

See also Graphic Communications and

Graphic Communications - Multimedia & Web

Contact the Graphic Communications Department for further information.
760-744-1150, ext. 2452
Office: MD-114
Associate Degree, Certificate of Achievement and Certificate of Proficiency requirements are listed in Section 6 (green pages).
For transfer information, consult a Palomar College Counselor.

COURSE OFFERINGS

GCIP 105　Design for Print Production　(3)
1½ hours lecture - 4½ hours laboratory
Transfer acceptability: CSU
Planning, design and layout of visual communication for print production. Basic computer applications for layout of business communication set using color, images, paper, and the lithographic production processes to complete the package. Emphasis is on practical application.

GCIP 140　Digital Imaging/Photoshop I　(3)
1½ hours lecture - 4½ hours laboratory
Transfer acceptability: CSU; UC
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. Focuses on basics.

GCIP 141　Digital Imaging/Photoshop II　(3)
1½ hours lecture - 4½ hours laboratory
Prerequisite: *A minimum grade of 'C' in GCIP 140*
Transfer acceptability: CSU; UC
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. Focuses on the technical.

GCIP 149　Page Layout and Design I　(3)
1½ hours lecture - 4½ hours laboratory
Transfer acceptability: CSU
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.

GCIP 152　Digital Publishing/Illustrator I　(3)
1½ hours lecture - 4½ hours laboratory
Transfer acceptability: CSU
Introduction to computer-generated digital layout. Illustrator will help the student generate new images or convert bitmapped images into PostScript. Quality levels needed for digital output will be evaluated.

GCIP 158　Small Unmanned Aircraft Systems Procedures and Regulations　(1)
1 hour lecture
Note: *Cross listed as GEOG 158 and GEOL 158*
Transfer acceptability: CSU
This course will equip students with knowledge about the regulations and procedures governing the safe and legal operation of small unmanned aircraft systems (sUAS), commonly referred to as "drones". The scope of this course coincides with the knowledge areas in the Federal Aviation Administration's Part 107 airman knowledge test for a Remote Pilot Certificate with a sUAS rating, and is intended to prepare students who wish to become commercial sUAS pilots for the knowledge test.

GCIP 168　Digital Imaging with Drones　(3)
1½ hours lecture - 4½ hours laboratory
Transfer acceptability: CSU
An introduction to using drones or unmanned vehicles for digital imaging. This hands-on course covers building, operating, and outfitting for still and video imaging and image capture.

GCIP 170　Screen Printing　(3)
1½ hours lecture - 4½ hours laboratory
Transfer acceptability: CSU
An introduction to the screen-printing process. Students will produce artwork, select mesh, frames, & stencil systems, inks and substrates based on printing techniques. A combination of laboratory applications and theory will provide the foundation for this course. Acquisition of technical skills through the actual production of screen-printed products is a major goal of this course.

GCIP 172　Textile Screen Printing　(3)
1½ hours lecture - 4½ hours laboratory
Transfer acceptability: CSU
Theory and applications of screen printing for textile use. Students will produce artwork, select compatible inks, stencil systems, and substrates based on textile printing applications. A combination of laboratory applications and theory will provide the foundation for this course. Acquisition of technical skills through the actual production of screen-printed products is a major goal of this course.

GCIP 190　Copyright for Graphic Designers & Web Developers　(1)
1 hour lecture
Note: *Cross listed as GCMW 190*
Transfer acceptability: CSU
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. This course is not intended to offer legal advice. Consult with competent legal professionals for any questions regarding specific copyright issues.

GCIP 240　Digital Imaging/Photoshop III　(3)
1½ hours lecture - 4½ hours laboratory
Prerequisite: *A minimum grade of 'C' in GCIP 140 or 141*
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. Focuses on the creative.

GCIP 249　Page Layout and Design II　(3)
1½ hours lecture - 4½ hours laboratory
Prerequisite: *A minimum grade of 'C' in GCIP 149*
Recommended Preparation: *GCIP 140*
Transfer acceptability: CSU
Utilizes current technologies for publishing to mobile devices, electronic book formats, screen media, and print. Students will learn to craft sophisticated electronic layouts by implementing typography, graphics, and multimedia into real-world projects.

GCIP 252　Digital Publishing/Illustrator II　(3)
1½ hours lecture - 4½ hours laboratory
Prerequisite: *A minimum grade of 'C' in GCIP 152*
Transfer acceptability: CSU
Advanced concepts and methods of Illustrator and its use in graphic illustrations and problem solving digital file production. Software capabilities for use in preparing computer files for publishing to digital and electronic delivery systems.

GCIP 268   Digital Imaging with Drones II   (3)
1½ hours lecture - 4½ hours laboratory
Prerequisite: A minimum grade of 'C' in GCIP 168
Intermediate uses of unmanned vehicles for digital imaging. This hands-on course covers high resolution video, aerial imaging, intelligent mission planning, and the use of multispectral payloads for image capture, editing, mapping and related uses.

GCIP 270   Commercial Screen Printing   (3)
1½ hours lecture - 4½ hours laboratory
Prerequisite: A minimum grade of 'C' in GCIP 170 and GCIP 172 Transfer acceptability: CSU
An advanced study of various commercial screen-printing applications. Printing processes, business aspects, case studies, advanced color reproduction, close register with an emphasis on quality control.

Graphic Communications - Multimedia and Web (GCMW)

See also Graphic Communications and

Graphic Communications - Imaging & Publishing

Contact the Graphic Communications Department for further information.
760-744-1150, ext. 2452
Office: MD-114
Associate Degree, Certificate of Achievement and Certificate of Proficiency requirements are listed in Section 6 (green pages).
For transfer information, consult a Palomar College Counselor.

COURSE OFFERINGS

GCMW 100 History of Multimedia   (3)
3 hours lecture
Transfer acceptability: CSU; UC
Multimedia embodies the convergence of technology with content to combine text, audio, photos, art, graphics, animation, and branching and linear video. It facilitates new ways of communicating, learning, entertaining, and self-expression; multimedia is reshaping the way we do business, practice medicine, and conduct scientific research. This course traces the emergence and development of "multimedia" as a digital technology medium within historical, global, social, cultural and aesthetic contexts.

GCMW 101 Multimedia I   (3)
1½ hours lecture - 4½ hours laboratory
Transfer acceptability: CSU
Introduction to multimedia authoring software and motion graphics combining text, graphics, sound, animation, video and user interface to produce effective visual presentations.

GCMW 102 Web Page Layout I   (3)
1½ hours lecture - 4½ hours laboratory
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.

GCMW 106 Multimedia for Social Networking   (3)
1½ hours lecture - 4½ hours laboratory
Transfer acceptability: CSU
Introduction to the language and practice of media production as it is implemented for social networking. Students will learn the moviemaking process: preproduction; capture footage; capture audio; import digital video and audio to the computer from the camera; edit; export; and distribute. In this hands-on course, students will organize and share their photo library; create polished video and soundtracks; and produce movies, photobooks, podcasts, Websites, blogs, and custom DVDs. By becoming media producers, students will cultivate their analytical abilities as students of communication and as critics and viewers of media and cultural products which are forms of communication technology.

GCMW 112 Mobile Devices/Web Page Layout   (2)
1 hour lecture - 3 hours laboratory
Transfer acceptability: CSU
Hands-on course that explores important considerations for making Web pages attractive and usable for a wide variety of mobile devices. Explores a variety of development tools for creating and testing Web pages for mobile screens and different strategies for deployment.

GCMW 115 Web Page Layout/WordPress   (2)
1 hour lecture - 3 hours laboratory
Transfer acceptability: CSU
A hands-on course on WordPress, a flexible software for blogging and content management. Students will learn WordPress installation, implementation, enhancements with add-ins, and customization of design and features.

GCMW 120 Designing for the Social Web   (3)
1½ hours lecture - 4½ hours laboratory
Transfer acceptability: CSU
Focuses on the understanding of graphical user interface design for the social Web environment (Web 2.0), such as wikis, blogs, and social networks. Covers fundamental 'Social Web' principles in order to develop designs from a user perspective. Covers Web technologies, market research, usability and human factors, wireframe and sitemap documentation, Web design, cross browser functionality, Web typography, and search engine marketability. The development of marketable, original, and creative problem solving solutions will also be examined with an emphasis on Web branding. In this hands-on class, students will participate in social networks such as wikis and blogs.

GCMW 154 Preparing Web Graphics   (1)
3 hours laboratory
Transfer acceptability: CSU
Hands-on course to produce optimized graphics for the Web: edit bitmap and vector graphics; format text; select Web-safe color; simple animation; and integrate with other Web production applications and Web pages developed with HTML and CSS.

GCMW 165 Digital Video Design   (3)
1½ hours lecture - 4½ hours laboratory
Transfer acceptability: CSU
Explores project planning, set-up, editing, and output of digital video. Incorporates sound, graphics, 2D animation, video, and text for full-screen, web, and DVD playback. Projects and assignments utilize transitions, superimposing, transparency and keying, video, audio, and other special effects.

GCMW 177 Search Engine Optimization (SEO) for Web Design   (3)
1½ hours lecture - 4½ hours laboratory
Recommended preparation: GCMW 102
Transfer acceptability: CSU
Integrate Search Engine Optimization (SEO) techniques to improve search engine traffic, visibility, conversion, and Return on Investment (ROI). This hands-on course presents guidelines and techniques for SEO strategy and implementation. Optimize Website design through complex design technologies such as wireframes, dynamic content, pay per click, keywords, copywriting, graphics, and multimedia. Incorporate blogs, forums, and chat. Measure traffic with analytics and metrics.

GCMW 190 Copyright for Graphic Designers & Web Developers (1)
1 hour lecture
Note: Cross listed as GCIP 190
Transfer acceptability: CSU
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. This course is not intended to offer legal advice. Consult with competent legal professionals for any questions regarding specific copyright issues.

GCMW 201 Multimedia II   **(3)**
1½ hours lecture - 4½ hours laboratory
Recommended preparation: GCMW 101 or GCMW 205
Transfer acceptability: CSU
Strategies and techniques for designing successful multimedia projects in Apple
Logic Pro X with emphasis on audio for Internet, video, composites and motion
graphics.

GCMW 202 Web Page Layout II   **(3)**
1½ hours lecture - 4½ hours laboratory
Prerequisite: A minimum grade of 'C' in GCMW 102
Transfer acceptability: CSU
Multimedia web site design and production using advanced WYSIWYG editor
that permits editing hypertext markup language (HTML) as well as designing
to current standards of CSS and interactivity. Includes mechanics for site
production as well as methodologies for project planning and management.

GCMW 204 Motion Graphics for Multimedia   **(3)**
1½ hours lecture - 4½ hours laboratory
Recommended preparation: GCIP 140
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.

GCMW 205 Digital Video for Multimedia   **(3)**
1½ hours lecture - 4½ hours laboratory
Transfer acceptability: CSU
Concepts, design and development of digital video production and editing skills
as they relate to Internet, mobile devices, screen media, and physical delivery
formats. Students will incorporate typography, graphics, animation and video
into real-world projects.

GCMW 206 Motion Graphics Production and Compositing   **(3)**
1½ hours lecture - 4½ hours laboratory
Transfer acceptability: CSU
Combines skills learned in multiple disciplines to create visual and special
effects. Students may use knowledge from GCMW and/or DBA courses with
that learned in ARTI or DT to composite scenes incorporating 3D rendered
characters with live video and matte paintings.

GCMW 215 Web Page Layout/WordPress II   **(2)**
1 hour lecture – 3 hours laboratory
Transfer acceptability: CSU
A hands-on course on WordPress, a flexible software for blogging and content
management. Students will learn advanced customization and advanced features.

GCMW 232 Web Accessibility Design   **(1)**
3 hours laboratory
Prerequisite: A minimum grade of 'C' in GCMW 102
Transfer acceptability: CSU
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.

Health (HE)

Contact the Department of Health, Kinesiology and Recreation Management
for further information.
760-744-1150, ext. 2459
Office: O-10

COURSE OFFERINGS

HE 100   Health Education and Fitness Dynamics   **(3)**
3 hours lecture
Transfer acceptability: CSU; UC
Individual well being will be developed through the study of the emotional,
spiritual, intellectual, social, and physical qualities of health.

HE 100L   Health Performance Lab   **(1,1.5,2)**
3, 4.5, or 6 hours laboratory
Transfer acceptability: CSU; UC
Fitness lab course designed to develop and encourage positive attitudes and
habits with regards to health education and fitness dynamics. Lab participation
will primarily utilize exercise equipment as it relates to cardiovascular efficiency,
body composition, muscular strength and endurance and flexibility. An individual
fitness profile will be established, including pre-post testing, to determine each
student's fitness accomplishments.

HE 104   Emergency Medical Responder   **(3)**
3 hours lecture
Note: Cross listed as EME 100
Transfer acceptability: CSU; UC
C-ID KINE 101
Covers national curriculum for Emergency Medical Responder (EMR) training.
Includes the study and application of emergency medical skills and procedures,
basic anatomy and physiology, terminology, and prevention of disease
transmission. CPR certification from the American Heart Association.

HE 165   Fundamentals of Nutrition   **(3)**
3 hours lecture
Note: Cross listed as NUTR 165
Transfer acceptability: CSU; UC – NUTR 165, NUTR 185, BIOL 185, HE 165
combined: maximum credit, one course
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
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,
and Nursing Education**

History (HIST)

Contact the Economics, History and Political Science Department for further information.
760-744-1150, ext. 2412
Office: MD-375

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*
C-ID HIST 130
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*
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*
C-ID HIST 170
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*
C-ID HIST 180
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*
C-ID HIST 150
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*
C-ID HIST 160
The development of the civilizations and the interrelationships of the peoples of Europe, Asia, Africa, and America since 1650.

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 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 160   History of the Middle East from 600 to the Present   (3)
3 hours lecture
Recommended Preparation: *HIST 107*
Note: *Cross listed as MCS 160*
Transfer acceptability: *CSU; UC*
History of the Middle East from the origins of Islam to contemporary times. Topics include the political, social, and economic development of Islam, the early caliphates, the Crusades, the Ottoman and Safavid empires, European imperialism, and modern Middle Eastern states.

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 and/or laboratory may be scheduled by the department. Refer to Class Schedule.
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*
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, Nutrition and Child Development

Humanities (HUM)

Contact the English Department for further information.
760-744-1150, ext. 2392
Office: H-302B

COURSE OFFERINGS

HUM 100   Introduction to Humanities I   (3)
3 hours lecture
Transfer acceptability: *CSU; UC*
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 II   (3)
3 hours lecture
Transfer acceptability: *CSU; UC*
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 197   Humanities Topics   (1-4)
Units awarded in topics courses are dependent upon the number of lecture hours required of the student. Refer to Class Schedule.
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)

Contact the Design and Manufacturing Technologies Department for further information.
760-744-1150, ext. 2349
Office: DR-5

Associate Degree, Certificate of Achievement and Certificate of Proficiency requirements are listed in Section 6 (green pages).

COURSE OFFERINGS

IT 108   Technical Mathematics   (3)
3 hours lecture
Note: *Cross listed as WELD 108*
Transfer acceptability: *CSU*
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 115   Industrial Safety   (2)
2 hours lecture
Transfer acceptability: *CSU*
Prepares the student to enter the workforce in an awareness of safety. Includes a history and overview; laws and regulations; assessment, prevention, and controls; and the management of health and safety issues.

IT 192   Manufacturing III Multi-Axis Programming
**   and Machining   (3)**
1 ½ hours lecture - 4 ½ hours laboratory
Prerequisite: *IT 191*
This course is designed to develop specialized 4- and 5-axis milling machine programming and skills using Mastercam. Students will receive instructions and drawings of parts requiring 4- or 5-axis milling. Students will design, model, program, set-up and run their parts on a multi-axis CNC Mill.

Information Technology

See CSIT - Information Technology

Interior Design (ID)

Contact the Design and Manufacturing Technologies Department for further information.
760-744-1150, ext. 2349
Office: DR-5

Associate Degree, Certificate of Achievement and Certificate of Proficiency requirements are listed in Section 6 (green pages).

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

COURSE OFFERINGS

ID 100   Interior Design   (3)
2 hours lecture – 3 hours laboratory
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 to develop residential interiors from design concepts to presentations. Instruction is given in furniture arrangement and selection, materials selection, lighting, and the effects of environmental design on human behavior.

ID 105   Materials and Resources   (3)
2 hours lecture – 3 hours laboratory
Prerequisite: *A minimum grade of 'C' in ARCH 105 and ID 125 or completion of or concurrent enrollment in ID 100*
Transfer acceptability: *CSU*
Selection, care, and use of sustainable materials and fabrics used in residential and commercial interior design. Emphasis on designer selection and specifications of fabrics and materials for upholstery, furniture, window treatments, floor coverings, and accessories. Applications of the methods, techniques, and tools used to specify and illustrate products.

ID 115   History of Decorative Arts I   (3)
3 hours lecture
Transfer acceptability: CSU
Foundations of architecture and furniture styles of the world from antiquity to the Empire period. Covers social, cultural, political, and physical factors affecting the design and development of specific styles and periods. Description of dominant influences and characteristics of historical interiors, furniture, ornamental design, textiles, and the decorative arts.

ID 121   History of Decorative Arts   (3)
3 hours lecture
Foundations of architecture and furniture styles of the world from antiquity to the Empire period. Covers social, cultural, political, and physical factors affecting the design and development of specific styles and periods. Description of dominant influences and characteristics of historical interiors, furniture, ornamental design, textiles, and the decorative arts.

ID 125   Presentation Methods in Interior Design I   (3)
2 hours lecture - 3 hours 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)
2 hours lecture – 3 hours laboratory
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 141   Commercial Interior Design   (3)
2 hours lecture – 3 hours laboratory
Prerequisite: *A minimum grade of 'C' in ID 100, ARCH 105, ID 125*
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)
2 hours lecture – 3 hours laboratory
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   Beginning Computer Aided Drafting   (3)
1½ hour lecture - 4½ hours laboratory
Note: *Cross listed as ARCH 150*
Transfer acceptability: CSU
An introduction to beginning computer aided drafting for architecture and interior design applications using Windows based AutoCAD software and IBM compatible computers. Beginning techniques in the operation of CAD software, design processes and editing techniques, storage and retrieval of drawings, professional presentation and plotting techniques.

ID 151   Advanced Computer Aided Drafting for Designers   (3)
1½ hour lecture - 4½ hours laboratory
Transfer acceptability: CSU
Advanced applications in drafting using AutoCAD and Revit software to include topics in prototype drawings, using specific libraries, external references, finish schedules, basic and advanced 3-Dimensional modeling, and, 3 Dimensional Renderings. Meets the current needs of the professional working designer.

ID 170   Space Planning   (3)
2 hours lecture – 2 hours laboratory
Prerequisite: *A minimum grade of 'C' in ID 100, ARCH 105 and ID 125*
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 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 and/or laboratory may be scheduled by the department. Refer to Class Schedule.
Transfer acceptability: CSU
Topics in Interior Design. See Class Schedule for specific topic offered. Course title will designate subject covered.

International Business (IBUS)

Contact the Business Administration Department for further information.
760-744-1150, ext. 2488
Office: MD-341
Associate Degree, Certificate of Achievement and Certificate of Proficiency requirements are listed in Section 6 (green pages).
110

COURSE OFFERINGS

**IBUS 100   Introduction to International Business
                        and Management   (3)**
3 hours lecture
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
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
Transfer acceptability: CSU
Focuses on the cultural environment of international business affecting the conduct of four regions in the Pacific Rim: Canada, Asia, Latin America, and Russia. Students examine the nature and evolution of culture, language, education, religion, and values as they apply to business situations. Examines the differences surrounding political and managerial practices in selected societies.

IBUS 115   International Banking and Finance   (3)
3 hours lecture
Recommended preparation: IBUS 100
Transfer acceptability: CSU
Surveys international organizations' basic elements for developing markets. Analyzes the market design and the techniques necessary to develop business within selected regions of the world. Discusses the impact due to differences in customs, languages, attitudes, and culture.

IBUS 120   Essentials of Import/Export Procedures   (3)
3 hours lecture
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 and/or laboratory may be scheduled by the department. Refer to Class Schedule.
Transfer acceptability: CSU
Topics in International Business. See Class Schedule for specific topic offered. Course title will designate subject covered.

Internet
See Graphic Communications - Multimedia and Web, and CSIT - Web Technology

Italian (ITAL)
Contact the World Languages Department for further information.
760-744-1150, ext. 2390
Office: H-201

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: A minimum grade of 'C' in ITAL 101 or two years of high school Italian
Transfer acceptability: CSU; UC
This course is the second semester of Italian at the elementary level. It 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 at least one previous semester of 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 and/or laboratory may be scheduled by the department. Refer to Class Schedule.
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 - 1 hour laboratory
Prerequisite: A minimum grade of 'C' in ITAL 102 or three years of high school Italian
Transfer acceptability: CSU; UC
This course is the third semester of Italian. 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. Course combines in-class instruction and practice with self-paced study in the World Languages Laboratory. Class is largely conducted in Italian.

ITAL 202   Italian IV   (5)
5 hours lecture
Prerequisite: ITAL 201, or
Transfer acceptability: CSU; UC
Fourth semester of Italian. A continued study of the Italian language and culture, focusing on the refined use of intermediate-level structures and readings of culturally relevant authentic materials. Emphasis is on the expansion of cross-cultural awareness, as well as, the development of language skills in order to acquire communicative competence in Italian. Teaches culture and facilitates language acquisition through listening, speaking, reading and writing. Interacts with more sophisticated authentic language in context. Conducted in Italian.

ITAL 225   Italian Reading and Conversation   (3)
3 hours lecture
Prerequisite: ITAL 102
Transfer acceptability: CSU; UC
An intermediate-level study of the Italian language and culture. Focus is on spoken language with readings of cultural material serving as a basis for discussion. Course is taught in Italian.

Japanese (JAPN)
Contact the World Languages Department for further information.
760-744-1150, ext. 2390
Office: H-201

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
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, and Kanji. Course combines in-class instruction and practice with self-paced study in the World Languages Resource Center. This beginning-level course is for students with no previous coursework in Japanese.

JAPN 102   Japanese II   (5)
5 hours lecture - 1 hour laboratory
Prerequisite: *A minimum grade of 'C' in JAPN 101, or two years of high school Japanese*
Transfer acceptability: *CSU; UC*
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-paced study in the Foreign Language Laboratory.

JAPN 130   Introduction of Japanese Culture and Literature   (3)
3 hours lecture
Transfer acceptability: *CSU; UC*
This course is designed to provide students with a broad understanding of Japanese culture and society through non-fictional and fictional literary texts and films from ancient times to present. It will include a brief survey of Japanese history as it relates to cultural developments in Japanese literature, film and the arts. There will be a special focus on critically examining literary texts and films to understand and interpret their cultural, social and historical context through primary sources (literature in translation, plays, film, anime, manga, etc.) and secondary sources (literary and cultural criticism). Select readings will introduce students to various topics including folklore, westernization, women's studies, war, and current popular culture. This course is discussion-based and will be conducted in English.

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 and/or laboratory may be scheduled by the department. Refer to Class Schedule.
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 - 1 hour laboratory
Prerequisite: *A minimum grade of 'C' in 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. Course combines in-class instruction with self-paced study in the World Languages Laboratory. Class is largely conducted in Japanese.

JAPN 202   Japanese IV   (5)
5 hours lecture
Prerequisite: *A minimum grade of 'C' in 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 Media Studies Department for further information.
760-744-1150, ext. 2440
Office: P-31
Associate Degree, Certificate of Achievement and Certificate of Proficiency requirements are listed in Section 6 (green pages).
Associate Degrees for transfer IGETC and CSUGE requirements are listed in Section 7 (green pages).
For transfer information, consult a Palomar College Counselor.

COURSE OFFERINGS

JOUR 101   Multimedia Writing and Reporting   (3)
3 hours lecture
Transfer acceptability: *CSU/UC pending*
C-ID JOUR 110
Principles of multimedia journalism. Develop news judgment and clear writing for various media platforms, including print, broadcast and online. Evaluation of news reporting techniques and sources, and ethical and legal considerations of the media. Preparation for a career in journalism.

JOUR 103   Magazine Feature Writing   (3)
3 hours lecture
Recommended preparation: *JOUR 101*
Transfer acceptability: *CSU*
Feature writing for publication in college magazine and online. Development of clear writing skills. Evaluation of interviewing techniques and information gathering. Applications of ethical and legal standards. Emphasis on practical application for print and online newspaper, magazine and web site journalism.

JOUR 105   Multimedia News Writing and Production   (3)
1½ hours lecture - 4½ hours laboratory
Transfer acceptability: *CSU*
C-ID JOUR 130
Emphasis on writing for The Telescope, Palomar's campus newspaper. Study of story development, reporting, and interviewing according to journalism standards. Includes writing news, features, sports, and opinion stories for the print newspaper or online at www.the-telescope.com. Exposure to multimedia skills such as blogging, video editing, and photo slide shows.

JOUR 110L   Multimedia Journalism Laboratory   (1)
3 hours laboratory
Transfer acceptability: *CSU*
Practice in reporting, writing, photography or designing for the campus newspaper, *The Telescope* and its website, www.The-Telescope.com

JOUR 112L   Laboratory for Online Journalism   (1)
3 hours laboratory
Transfer acceptability: *CSU*
Practice in online reporting, writing, photographing and multimedia. Design and manage content for the newspaper and magazine websites.

JOUR 130   Blogging   (3)
3 hours lecture
Transfer acceptability: *CSU*
C-ID JOUR 120
This course will show students how to plan, research and create a blog. It will teach the theory of effective blogging before delving into the application. Students will learn how to write for a blog, consistently generate interesting content and design a blog in a simple, reader-friendly way. This course will also introduce students to multimedia elements like videos and photography as well as interactivity and social media promotion.

JOUR 140   Photojournalism   (3)
1½ hours lecture - 4½ hours laboratory
Recommended preparation: PHOT 120
Note: Cross listed as PHOT 140
Transfer acceptability: CSU
C-ID JOUR 160
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 200   Mastering Social Media   (3)
3 hours lecture
Transfer acceptability: CSU
Explores social media from a content perspective. Learn the fundamentals of social media, the theories behind writing for it, as well as the ethics and standards of information generated. Also explores how to use social media to get content to the masses.

**JOUR 205   Intermediate Multimedia News Writing
                  and Production   (3)**
1½ hours lecture - 4½ hours laboratory
Transfer acceptability: CSU
C-ID JOUR 210
Intermediate work in reporting, writing, editing and multimedia projects for The Telescope, Palomar's campus newspaper. Continuation of beat reporting, interviewing and public affairs reporting. Introduction of page layout, graphic design and photography.

JOUR 210   Advanced Multimedia News Production   (3)
1½ hours lecture - 4½ hours laboratory
Transfer acceptability: CSU
Editing role at independent campus newspaper, The Telescope, and its website, www.the-telescope.com. Emphasis on assigning stories, working with writers, and polishing work for multimedia platforms. Advanced work on newspaper and website design.

JOUR 215   Advanced Multimedia News Editing   (3)
1½ hours lecture - 4½ hours laboratory
Transfer acceptability: CSU
Advanced editing skills for the independent campus newspaper, The Telescope and its website, www.the-telescope.com. Advanced work on producing newspaper content for multimedia platforms as well as learning to make editorial decisions. Emphasis on social media and multimedia pieces for Internet news consumers.

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
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.

Kinesiology

Formerly Physical Education
See also Athletics and Competitive Sports

Contact the Department of Health, Kinesiology and Recreation Management for further information.
760-744-1150, ext. 2459
Office: O-10
Associate Degree, Certificate of Achievement and Certificate of Proficiency requirements are listed in Section 6 (green pages).
Associate Degrees for transfer IGETC and CSUGE requirements are listed in Section 7 (green pages).

COURSE OFFERINGS

Individual courses are not repeatable. State Regulations (Title 5, Sections 55040-55041) also limit the number of times a student may take courses with related content and similar primary educational activities. Therefore, some combinations of course work in Kinesiology have limitations on the number of times a student may enroll. Specific information about enrollment limitations for Kinesiology classes is available at http://www.palomar.edu/schedule/restrictions.htm

Student athletes competing in an Athletic and Competitive Sport are limited to 175 contact hours per year in Kinesiology courses that focus on conditioning or skill development for that sport. Specific information about enrollment limitations for Kinesiology classes is available at http://www.palomar.edu/schedule/

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

UC credit limitations: All ACS and KINE activity courses combined: maximum credit, 4 units

For transfer information, consult a Palomar College Counselor.

KINE 47   Physical Education/Kinesiology Topics   (.5 - 4)
Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture and/or laboratory may be scheduled by the department. Refer to Class Schedule.
Non-degree Applicable
Topics in Physical Education/Kinesiology. See class schedule for specific topic covered. Course title will designate subject covered.

KINE 100   Introduction to Kinesiology   (3)
3 hours lecture
Transfer acceptability: CSU; UC
C-ID KIN 100
Introduction to an interdisciplinary approach to the study of human movement. Sub-disciplines will introduce students to the various fields closely related to Kinesiology. Focus on studying the goals and objectives of modern Kinesiology with a view toward the development of a basic philosophy and background for the professions of teaching, coaching, allied health and/or fitness career.

**KINE 102   Physical Education in Elementary Schools,   (3)
                  Movement and Theory**
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, writing and conducting physical education programs and curriculum. Specific attention will also be given to drugs/narcotics, alcohol, and tobacco and the physiological and sociological effects of each.

KINE 105   Cardio Conditioning Applications   (1.5)
1 hour lecture - 1½ hours laboratory
Transfer acceptability: *CSU/UC pending*
Instruction designed to reinforce and improve one's individual fitness exercise program through the implementation of cardio respiratory fitness modes. The course will utilize current fitness technology and fitness applications that monitor fitness modes including, but not limited to, walking, power walking, jogging, cycling, hiking, and related cardio training. Students will apply fitness terminology, assess and analyze their initial and final cardio fitness level and monitor daily tracking of cardio respiratory fitness principles. Students will design and individualized fitness program to evaluate improvement of various fitness applications and tests as well as their impact on fitness parameters and promoting lifelong wellness.

KINE 114A   Beginning Walkfit   (1, 1.5, 2)
½, 1, or 1½ hours lecture - 1½, 2, or 3 hours laboratory
Transfer acceptability: *CSU; UC*
Instruction and training in walking techniques for the beginning walker. Programs focusing on health, cardiovascular fitness and weight loss.

KINE 114B   Intermediate Walkfit   (1, 1.5, 2)
½, 1, or 1½ hours lecture - 1½, 2, or 3 hours laboratory
Transfer acceptability: *CSU; UC*
Instruction and training in high intensity and speed walking techniques to increase aerobic capacity and calorie expenditure.

KINE 114C   Advanced Walkfit   (1-2)
½, 1, or 1½ hours lecture - 1½, 2 or 3 hours laboratory
Transfer acceptability: *CSU; UC*
Instruction and training in long distance walking techniques to increase endurance and distance for the advanced walker.

KINE 117A   Beginning Golf -Techniques and Analysis   (1, 1.5, 2)
(Formerly KINE 117)
½, 1, or 1½ hours lecture - 1½, 2, or 3 hours laboratory
Transfer acceptability: *CSU; UC*
Introductory course teaching the history, traditions and the development of the basic skills of golf. Swing fundamentals, scoring, rules, etiquette, and course layout will be introduced. Application of golf course management skills through practice and situational play will be emphasized.

KINE 117B   Intermediate Golf-
**   Techniques and Analysis   (1, 1.5, 2, 2.5)**
(Formerly KINE 118)
½, 1, or 1½ hours lecture - 1½, 2, or 3 hours laboratory
Transfer acceptability: *CSU; UC*
Designed for those students who have mastered the basic skills of beginning golf. Includes the techniques (pitching, chipping, putting, sand shots and wood shots) that should enable the intermediate student to play a successful round of golf. Situation analysis, course management and strategy will also be covered.

KINE 117C   Advanced Golf - Techniques and Analysis   (1, 1.5, 2)
(Formerly KINE 119)
½, 1, or 1½ hours lecture - 1½, 2, or 3 hours laboratory
Transfer acceptability: *CSU; UC*
An advanced level course teaching skills of golf strokes and application to playing strategies. Emphasis will be on the implementation of learned specialty shots, advanced techniques, statistical performance goals and mental aspects of course management in competition.

KINE 125A   Aerobic Fitness Training Modes   (1, 1.5, 2)
½, 1, or 1½ hours lecture - 1½, 2, or 3 hours laboratory
Transfer acceptability: *CSU; UC*
Training in cardio respiratory endurance, as it pertains to exercise programs and/or performance level. Methods to achieve training may include, but are not limited to: aquatics, running, and walking. Emphasis is on pre-testing, post-testing, and the overall development of personal fitness.

KINE 125B   Anaerobic Fitness Training Modes   (1, 1.5, 2)
½, 1, or 1½ hours lecture - 1½, 2, or 3 hours laboratory
Transfer acceptability: *CSU; UC*
Training in muscular strength and core fitness as it pertains to exercise programs and/or performance-level anaerobic fitness. Methods to achieve fitness may include, but are not limited to: resistance, isometric, isotonic and core exercise training techniques.

KINE 125C   Functional Fitness Training Modes   (1, 1.5, 2)
½, 1, or 1½ hours lecture - 1½, 2, or 3 hours laboratory
Transfer acceptability: *CSU; UC*
Training in functional fitness through exercise specific to individual occupational goals. Methods to achieve training may include, but are not limited to: flexibility, skill training, body and muscle balance and postural improvement.

KINE 125D   Motor Fitness/Hand-Eye/Foot Skills   (1, 1.5, 2)
½, 1, or 1½ hours lecture - 1½, 2, or 3 hours laboratory
Transfer acceptability: *CSU; UC*
Training in motor fitness skills including hand-eye and foot skills. Methods to achieve training may include, but are not limited to: speed training, and/or neuromuscular training. Emphasis is on pre-testing, post-testing and overall development of personal fitness.

KINE 128A   Wellness Modalities- Cardio   (1, 1.5, 2)
3, 4½ or 6 hours laboratory
Transfer acceptability: *CSU; UC*
Note: *Open entry/Open exit; Pass/No Pass grading only; may not be taken as an audit*
Cardio-respiratory conditioning through aerobic fitness programs. Activities include treadmill, stair-master, stationary biking, rowing, and elliptical machines. Individualized tests determine the cardio-respiratory conditioning program and the level of performance expected to improve overall health and fitness.

KINE 128B   Wellness Modalities-Muscular   (1, 1.5, 2)
3, 4½ or 6 hours laboratory
Transfer acceptability: *CSU; UC*
Note: *Open entry/Open exit; Pass/No Pass grading only; may not be taken as an audit*
Physical conditioning through individualized resistance training programs. Focus is on muscular strength, muscular endurance and core training. Activities may include, but are not limited to body weight exercises, calisthenics, weight machines, resistance bands, kettle balls, etc.

KINE 128C   Wellness Modalities- Functional   (1, 1.5, 2)
3-6 hours laboratory
Transfer acceptability: *CSU; UC*
Note: *Open entry/Open exit; Pass/No Pass grading only; may not be taken as an audit*
Functional fitness training designed to apply directly to students individual fitness goals. Activities include but are not limited to exercises aimed to assist in performing activities of daily living, sport-specific training, rehabilitative programs, etc. based on the individuals physical abilities and/or physical limitations.

KINE 128D   Wellness Modalities- Periodization   (1, 1.5, 2)
3-6 hours laboratory
Transfer acceptability: *CSU; UC*
Note: *Open entry/Open exit; Pass/No Pass grading only; may not be taken as an audit*
Physical conditioning through the components of physical fitness; cardiorespiratory endurance, muscular strength, muscular endurance and flexibility. Initial fitness measurements determine the conditioning program, level of performance, and planned variations in individualized programs to improve overall fitness.

KINE 135A   Beginning Swimming   **(1, 1.5, 2)**
½, 1, or 1½ hours lecture - 1½, 2, or 3 hours laboratory
Transfer acceptability: CSU; UC
Instruction will include basic water safety techniques, proper breathing and arm and leg techniques that apply to the basic swimming strokes such as front crawl, back crawl, and treading water. The use of skill development aids will be introduced.

KINE 135B   Intermediate Swimming   **(1, 1.5, 2)**
½, 1, or 1½ hours lecture - 1½, 2, or 3 hours laboratory
Transfer acceptability: CSU; UC
An introduction to intermediate swimming strokes including breaststroke and butterfly, starts, and turns. Emphasis is on basic diving and turning techniques and continued skill development and fitness conditioning.

KINE 135C   Advanced Swimming   **(1, 1.5, 2)**
½, 1, or 1½ hours lecture - 1½, 2, or 3 hours laboratory
Transfer acceptability: CSU; UC
Designed for the highly skilled, competitive swimmer with an emphasis on principles of advanced training programs including distance, sprint, stroke and conditioning techniques for competition.

KINE 140A   Beginning Tennis: Techniques and Analysis   **(1-2)**
(Formerly KINE 140)
½, 1, or 1½ hours lecture - 1½, 2, or 3 hours laboratory
Transfer acceptability: CSU; UC
Focus on the basic elements of the game of tennis for the beginning-level student. Introduces terminology, court areas, scoring and court etiquette. Fundamental techniques for the basic tennis strokes, including ground strokes, service, lob and volley.

KINE 140B   Intermediate Tennis:
Techniques and Analysis   **(1, 1.5, 2, 2.5)**
(Formerly KINE 141)
½, 1, or 1½ hours lecture - 1½, 2, or 3 hours laboratory
Transfer acceptability: CSU; UC
Intermediate tennis for competitive play includes covering court etiquette, motorskill development and the introduction of intermediate singles and doubles strategic through competition.

KINE 140C   Advanced Tennis: Techniques and Analysis   **(1-2)**
(Formerly KINE 142)
½, 1, or 1½ hours lecture - 1½, 2, or 3 hours laboratory
Transfer acceptability: CSU; UC
Advanced tennis instruction for the highly skilled competitive player. Principles on stroke development, court positioning, serving systems and game strategies associated with singles, competition, doubles competition. Tournament play will be emphasized.

KINE 150A   Beginning Weight Training   **(1, 1.5, 2)**
½, 1, or 1½ hours lecture - 1½, 2, or 3 hours laboratory
Transfer acceptability: CSU; UC
This course is for the beginner level and is designed to emphasize a Total Body Toning Program. Focusing on muscle endurance, strength, flexillity, cardiovascular efficiency, and body composition through weight resistance exercises and conditioning programs.

KINE 150B   Intermediate Weight Training-
Strength Training for Total Fitness   **(1, 1.5, 2)**
½, 1, or 1½ hours lecture - 1½, 2, or 3 hours laboratory
Transfer acceptability: CSU; UC
This course is designed for the experienced level student and focuses on the principles of Cross Training for muscular strength development: explores the science and benefits of developing skeletal-muscular and cardiovascular-aerobic fitness via intense exercise with resistive weights equipment.

KINE 150C   Advanced Weight Training-
Power Lifting and Plyometrics Training   **(1, 1.5, 2)**
½, 1, or 1½ hours lecture - 1½, 2, or 3 hours laboratory
Transfer acceptability: CSU; UC
This course is designed for the advanced level student and will provide the opportunity, understanding, and appreciation of Power Lift Training through a system of heavy resistance (and low repetition) exercises and Plyometic training that build power in large muscle groups.

KINE 155A   Beginning Volleyball: Techniques and Analysis   **(1-2)**
(Formerly KINE 155)
½, 1, or 1½, hours lecture - 1½, 2, or 3 hours laboratory
Transfer acceptability: CSU; UC
Focus on basic skills and fundamentals for individual beginning volleyball students. Includes the development of passing, setting, hitting, serving, conditioning and safety. Emphasis on knowledge of rules and principles of the sport of volleyball.

KINE 155B   Intermediate Volleyball:
Techniques and Analysis   **(1, 1.5, 2, 2.5)**
(Formerly KINE 156)
½, 1, or 1½ hours lecture - 1½, 2, or 3 hours laboratory
Transfer acceptability: CSU; UC
Development of volleyball skills for the experienced participant. Emphasis on the execution of individual and team offensive and defensive strategies and communication systems.

KINE 155C   Advanced Volleyball: Techniques and Analysis   **(1, 1.5, 2)**
(Formerly KINE 157)
½, 1, or 1½ hours lecture - 1½, 2, or 3 hours laboratory
Transfer acceptability: CSU; UC
Advanced skill work, individual techniques, conditioning and competitive offensive and defensive strategies for the high skilled player.

KINE 166A   Beginning Basketball   **(1, 1.5, 2)**
½, 1, or 1½ hours lecture - 1½, 2, or 3 hours laboratory
Transfer acceptability: CSU; UC
Basketball principles, rules, safety, individual techniques, and skill sets. Basic offensive and defensive patterns will be introduced.

KINE 166B   Intermediate Basketball   **(1, 1.5, 2)**
½, 1, or 1½ hours lecture - 1½, 2, or 3 hours laboratory
Transfer acceptability: CSU; UC
Basketball techniques, biomechanics, offensive and defensive patterns for the experienced player.

KINE 166C   Advanced Basketball   **(1, 1.5, 2)**
½, 1, or 1½ hours lecture - 1½, 2, or 3 hours laboratory
Transfer acceptability: CSU; UC
Advanced Basketball techniques including individual skills and team principles. Sophisticated team play, defensive sets and offensive patterns for the highly skilled participant.

KINE 168A   Beginning Soccer   **(1, 1.5, 2)**
½, 1, or 1½ hours lecture - 1½, 2, or 3 hours laboratory
Transfer acceptability: CSU; UC
Focus on the basic skills and individual fundamentals for the beginning soccer student. Includes the development of ball handling, passing, receiving, heading, goalkeeping, defending, conditioning and safety. Emphasis on knowledge of rules and principles of the sport of soccer.

KINE 168B   Intermediate Soccer   **(1, 1.5, 2))**
½, 1, or 1½ hours lecture - 1½, 2, or 3 hours laboratory
Transfer acceptability: CSU; UC
Development of soccer skills for the experienced participant. Emphasis on the execution of individual and team offensive and defensive strategies and communication systems.

KINE 168C   Advanced Soccer   **(1, 1.5, 2)**
½, 1, or 1½ hours lecture - 1½, 2, or 3 hours laboratory
Transfer acceptability: *CSU; UC*
Advanced skill work, individual techniques, conditioning and competitive offensive and defensive strategies for the highly skilled player.

KINE 170A   Team Sports - Baseball Strategies   **(1, 1.5, 2)**
½, 1, or 1½ hours lecture - 1½, 2, or 3 hours laboratory
Transfer acceptability: *CSU; UC*
Instruction in team strategies in the sport of Baseball for the experienced competitor. Instruction includes individual and team principles, tactics, and communication systems as they apply to offensive and defensive strategy.

KINE 170B   Team Sports- Baseball Biomechanics   **(1, 1.5, 2))**
½, 1, or 1½ hours lecture - 1½, 2, or 3 hours laboratory
Transfer acceptability: *CSU; UC*
Biomechanical applications and participation for the experienced competitor, including individual and team skills and techniques as they apply to offense and defense in the sport of Baseball.

KINE 170C   Team Sports- Basketball Strategies   **(1, 1.5, 2)**
½, 1, or 1½ hours lecture - 1½, 2, or 3 hours laboratory
Transfer acceptability: *CSU; UC*
Theory, philosophy and strategies for the highly skilled competitor in the sport of basketball.

KINE 170D   Team Sports- Basketball Biomechanics **(1, 1.5, 2)**
½, 1, or 1½ hours lecture - 1½, 2, or 3 hours laboratory
Transfer acceptability: *CSU; UC*
Progressive application of biomechanical movement to position skills through participation in team sports for basketball.

KINE 170E   Team Sports- Football Strategies   **(1, 1.5, 2)**
½, 1, or 1½ hours lecture - 1½, 2, or 3 hours laboratory
Transfer acceptability: *CSU; UC*
Instruction in individual and team theory, philosophy, and strategies in the sport of Football.

KINE 170F   Team Sports- Football Biomechanics   **(1, 1.5, 2)**
½, 1, or 1½ hours lecture - 1½, 2, or 3 hours laboratory
Transfer acceptability: *CSU; UC*
Progressive application of biomechanical movement to position skills through participation in team sports for football.

KINE 170G   Team Sports- Soccer Strategies   **(1, 1.5, 2)**
½, 1, or 1½ hours lecture - 1½, 2, or 3 hours laboratory
Transfer acceptability: *CSU; UC*
Instruction in theory, philosophy and strategies in the sport of Soccer for the experienced competitor.

KINE 170H   Team Sports- Soccer Biomechanics   **(1, 1.5, 2)**
½, 1, or 1½ hours lecture - 1½, 2, or 3 hours laboratory
Transfer acceptability: *CSU; UC*
Focus on individual soccer skills, strength training, conditioning and biomechanical application of techniques for the highly skilled competitor. Emphasis on offensive and defensive skills in a team setting.

KINE 170I   Team Sports- Softball Strategies   **(1, 1.5, 2)**
½, 1, or 1½ hours lecture - 1½, 2, or 3 hours laboratory
Transfer acceptability: *CSU; UC*
Instruction in theory, philosophy and strategies in the sport of Softball for the highly-skilled competitor.

KINE 170J   Team Sports- Softball Biomechanics   **(1, 1.5, 2)**
½, 1, or 1½ hours lecture - 1½, 2, or 3 hours laboratory
Transfer acceptability: *CSU; UC*
Progressive application of biomechanical movement to position skills through participation in team sports for softball.

KINE 170O   Team Sports- Wrestling Strategies   **(1, 1.5, 2)**
½, 1, or 1½ hours lecture - 1½, 2, or 3 hours laboratory
Transfer acceptability: *CSU; UC*
Instruction in theory, philosophy, competition strategies and fitness concepts in the sport of Wrestling for the experienced competitor.

KINE 170P   Team Sports- Wrestling Biomechanics   **(1, 1.5, 2)**
½, 1, or 1½ hours lecture - 1½, 2, or 3 hours laboratory
Transfer acceptability: *CSU; UC*
Biomechanical movement patterns specific to skills and techniques in wrestling. Training modes and conditioning parameters necessary for competition will be emphasized.

KINE 175A   Psychology of Specific Athletic
              Competition – Contact   **(2)**
2 hours lecture
Transfer acceptability: *CSU*
Psychological, mental, and physical preparation for the competitive athlete.

KINE 175B   Psychology of Specific Athletic
              Competition – Minimal Contact   **(2)**
2 hours lecture
Transfer acceptability: *CSU*
Psychological, mental, and physical preparation for the competitive athlete.

KINE 175C   Psychology of Specific Athletic
              Competition – Non-Contact   **(2)**
2 hours lecture
Transfer acceptability: *CSU*
Psychological, mental, and physical preparation for the competitive athlete.

KINE 175D   Psychology of Specific Athletic
              Competition – Skilled   **(2)**
2 hours lecture
Transfer acceptability: *CSU*
Psychological, mental, and physical preparation for the competitive athlete.

KINE 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.

KINE 181   Adaptive Aquatics   **(1)**
3 hours laboratory
Transfer acceptability: *CSU; UC*
Basic swimming, survival strokes, and water orientation adapted to individual student's disability.

KINE 182   Adaptive Weight Training   **(1)**
3 hours laboratory
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.

KINE 183   Adaptive Skiing   **(1, 1.5)**
3 or 4½ hours laboratory
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.

KINE 184   Adaptive Body Conditioning   **(1)**
3 hours laboratory
Transfer acceptability: *CSU; UC*
Training to increase endurance, flexibility, and strength. Emphasis on individual fitness profile.

KINE 190   Theory of Softball   (2)
2 hours lecture
Transfer acceptability: *CSU; UC*
Fastpitch softball rules, playing techniques, coaching strategies, and practice organization.

KINE 197   Topics in Physical Education and Kinesiology   (.5 - 4)
Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture and/or laboratory may be scheduled by the department. Refer to Class Schedule.
Transfer acceptability: *CSU*
Topics in Physical Education and Kinesiology. See Class Schedule for specific topic offered. Course title will designate subject covered.

KINE 204A   Off Season Sports Conditioning I - Aerobic/ Anaerobic Development   (1, 1.5, 2)
½, 1, or 1½ hours lecture - 1½, 2, or 3 hours laboratory
Note: *May be open entry/open exit*
Transfer acceptability: *CSU; UC*
An intensified out of season conditioning and strength program for men and women in intercollegiate sports. Varied forms of aerobic and anaerobic strength training will be utilized in an effort to enhance sport specific strength, speed, and endurance conditioning.

KINE 204B   Off Season Conditioning II- Motor Skill Development and Application   (1, 1.5, 2)
½, 1, or 1½ hours lecture - 1½, 2, or 3 hours laboratory
Transfer acceptability: *CSU; UC*
An intensified out of season skill develpment program for men and women in intercollegiate sports. Selected skill and agility exercise will be practiced to enhance quickness, coordination, balance, reaction time and overall motor skill training techniques.

KINE 205A   In Season Sports Conditioning I - Aerobic and Anaerobic   (1, 1.5, 2)
½, 1, or 1½ hours lecture - 1½, 2, or 3 hours laboratory
Note: *May be open entry/open exit*
Transfer acceptability: *CSU; UC*
Aerobic and Anaerobic maintenance training program for men and women in intercollegiate sports during season. Sports specific program will consist of cardiovascular, muscular strength and endurance training modes and their application to competition.

KINE 205B   In Season Conditioning II- Fine Motor Skills Maintenance   (1, 1.5, 2)
½, 1, or 1½ hours lecture - 1½, 2, or 3 hours laboratory
Transfer acceptability: *CSU; UC*
Maintenance training program for men and women in intercollegiate sports during season. Proper use of weights will be emphasized. Sports specific agility program, eye hand and foot speed/endurance work, and motor skill efficiency will be enhanced through use of different in season conditioning parameters.

KINE 210   Professional Prep for Football - Theory and Mental Preparation   (3)
3 hours lecture
Transfer acceptability: *CSU; UC*
Emphasis on rules, individual and team strategies, mental preparation for competition, weekly practice, philosophies, coaching theories and current trends for the sport of Football.

KINE 210L   Professional Prep for Football Lab - Biomechanic Application   (1, 1.5)
3 or 4½ hours laboratory
Transfer acceptability: *CSU; UC*
Biomechanical application of fundamental skills with emphasis on strategy, skill development, preparation for competition, weekly practice schedules, and trends for the sport of Football.

KINE 211L   Professional Preparation for Basketball Lab   (1, 1.5)
3 or 4½ hours laboratory
Transfer acceptability: *CSU; UC*
Biomechanical applications of individual and team Basketball skills, techniques and strategies.

KINE 212   Professional Prep for Baseball - Theory and Mental Preparation   (3)
3 hours lecture
Transfer acceptability: *CSU; UC*
Emphasis on history, rules, individual and team strategies, mental preparation for competition. Practice planning, coaching theories and philosophies and trends in the sport of Baseball.

KINE 212L   Professional Prep for Baseball Lab - Biomechanic Application   (1, 1.5)
3 or 4½ hours laboratory
Transfer acceptability: *CSU; UC*
This course will focus on the biomechanical application of individual and team Baseball skills, techniques and strategy. Specific drills, communication systems for respective positions and the development of bunting, hitting, pitching and baserunning mechanics will be emphasized.

KINE 215L   Professional Prep Wrestling Lab - Biomechanic Application   (1, 1.5)
3 or 4½ hours laboratory
Transfer acceptability: *CSU; UC*
Biomechanical application of wrestling styles, individual strategy and skill development for competition. Emphasis on pre-match preparation including goal setting and drill progressions.

KINE 216L   Professional Prep for Golf Lab - Biomechanic Application   (1, 1.5)
3 or 4½ hours laboratory
Transfer acceptability: *CSU; UC*
Biomechanical application of fundamental skills with emphasis on technique, competition strategy, trends, preparation for competition and weekly practice schedules for the sport of Golf.

KINE 217L   Professional Prep Tennis Lab - Biomechanic Application   (1, 1.5)
3 or 4½ hours laboratory
Transfer acceptability: *CSU; UC*
Focus on the biomechanical application of Tennis skills and techniques. Emphasis on practice drills for doubles and singles competition including ground strokes and short court strokes.

KINE 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.

KINE 295   Directed Study in Physical Education and Kinesiology   (1, 2, 3)
3, 6, or 9 hours 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 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.

Legal Studies (LS)

Contact the Business Administration Department for further information.
760-744-1150, ext. 2488
Office: MD-341
Associate Degree, Certificate of Achievement and Certificate of Proficiency requirements are listed in Section 6 (green pages).
For transfer information, consult a Palomar College Counselor.

COURSE OFFERINGS

LS 105   Legal Communications and Methods   (3)
3 hours lecture
Note: May not be taken for Pass/No Pass grading
Transfer acceptability: CSU
This course is an introduction to legal writing and research. The course begins with an overview of basic writing skills and preparation of legal correspondence. In addition, the course reviews the use of proper legal citations, and the drafting of legal memoranda. Basic research methods are reviewed to introduce the student to legal research and analysis.

LS 110   Computer Skills for the Legal Profession   (2)
1 hour lecture - 3 hours laboratory
Transfer acceptability: CSU
A comprehensive hands-on study of computer software applications in the legal environment to include Word, Excel, Access, PowerPoint, PDF files, scanning, internet literacy and specific legal software.

LS 121   Introduction to Law   (3)
3 hours lecture
Note: Cross listed as POSC 121
Transfer acceptability: CSU; UC - BUS 115, 116, 117, LS 121 combined: maximum credit, one course.
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   Ethical Reasoning   (3)
3 hours lecture
Transfer acceptability: CSU
This course provides an introduction to concepts and theories of ethical decision-making, moral conduct, obligation and permission, justice, and 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 170   Alternative Dispute Resolution   (3)
3 hours lecture
Transfer acceptability: CSU
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.

LS 240   Civil Liberties and Procedures   (3)
3 hours lecture
Note: Cross listed as POSC 240
Transfer acceptability: CSU; UC
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 261   Torts and Personal Injury   (3)
3 hours lecture
Prerequisite: A minimum grade of 'C' in LS/POSC 121
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.

LS 290   Contemporary Legal Issues   (3)
3 hours lecture
Prerequisite: A minimum grade of 'C' in LS 105
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.

Library Technology (LT)

Contact the Library and Information Technology Department for further information.
760-744-1150, ext. 2666
Office: LRC-322
Associate Degree, Certificate of Achievement and Certificate of Proficiency requirements are listed in Section 6 (green pages).

COURSE OFFERINGS

LT 100   Introduction to Libraries and Information Services   (3)
3 hours lecture
Transfer acceptability: CSU
Covers the role of Library/Media Technicians (LMTs) in meeting information needs of diverse populations and communities served by the four major types of libraries. The history of libraries, principles of customer service and ethical issues faced by library workers are examined. Duties of LMTs in the areas of Access Services, Collection Services, Information Services, and Technical Services are reviewed in depth. Additional topics include: library funding; job searches, relationship with Librarians, library automation, digital services and continuing education.

LT 105   Research Skills & Informed Learning   (3)
3 hours lecture
Transfer acceptability: CSU
This course prepares the student to evaluate, synthesize, and apply information to answer questions or solve problems. Students will engage in a sustained research project and create informative and persuasive materials based on the results of their inquiry. Students will also engage in informed learning by reflecting on the information they use and their research process, preparing them to provide support to library users.

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 customer service, interlibrary loan services, circulation of materials, fines, patron records, supervision, material shelving, 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 125   Developing Information Literacy Skills   (1)
1 hour lecture
Transfer acceptability: CSU
Develops the information skills students need to succeed at the college level: uncover information not readily identified by search engines; determine if the information found is credible and appropriate for college level course work; and cite sources appropriately in order to support ideas and avoid plagiarism. Students will be encouraged to research topics currently being studied in other college courses.

LT 130   Library Media and Technology   (3)
3 hours lecture
Transfer acceptability: CSU
Practical skills and knowledge about technology necessary for library work. Addresses general trends and developments in technology applications for library functions and services. Prepares the student to provide access to and educate the user in the use of technologies and equipment relevant to information seeking, access, and use.

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.

Machining Technology (MACH)

Contact the Design and Manufacturing Technologies Department for further information.
760-744-1150, ext. 2349
Office: DR-5

MACH 120   Precision Measure and Metrology   (3)
1½ hours lecture - 4½ hours laboratory
Precision Measuring and Metrology introduces the concepts and vocabulary of basic measuring systems and tools, basic tolerance, print reading, calibration fundamentals, surface measurements, thread inspection, and hole inspection. Students will use the Geometric Dimensioning and Tolerance (GD&T) Matrix to identify and measure features of a part using basic hand measuring techniques and also advanced measuring techniques using Faro Arm, CMM, and Optical Comparator.

MACH 125   Tooling Concepts   (3)
1½ hours lecture - 4½ hours laboratory
The Tooling Concepts course is an introduction of basic metal removal tools such as drills, endmills, and insert cutters. This course will cover the basics of metal removal concepts—High Speed Steel (HSS) vs. Carbide while implementing current industry techniques. Students will learn how and when to select the proper tools per application. Course will also cover Safety, Workholding, and Modern Manufacturing concepts.

MACH 190   CNC Machining MasterCam I   (3)
1½ hours lecture - 4½ hours laboratory
Note: Cross listed as DT 190/ENGR 190/WELD 190
This course will introduce the student to CNC Machining on mills and lathes. Learn how to set-up and operate machines using G-Code and MasterCAM to manufacture parts and projects. Students will receive instructions and drawings of parts requiring 2- or 3-axis machining. Students will set-up, operate, and run parts on a variety of CNC Equipment.

MACH 191   CNC Machining MasterCam II   (3)
1½ hours lecture - 4½ hours laboratory
Prerequisite: MACH 190
Use 2D and 3D geometry within Cam software (MasterCam) to produce G-code programs for CNC Machines. Students will model, program, set-up and run their parts on various computer controlled mills and lathes.

MACH 228   Metallurgy and Industrial Materials   (3)
1½ hours lecture - 4½ hours laboratory
Transfer acceptability: CSU
Introduction to physical metallurgy and Industrial Materials, oriented towards the machinist, welding , and metal working trades. Covers destructive and non-destructive testing, steel manufacturing and its classification, identification methods, alloy steel, cast and wrought iron, heat treating. Also covering materials such as plastics and carbon fiber.

Mathematics (MATH)

Contact the Mathematics Department for further information.
760-744-1150, ext. 2535
Office: P-2
Associate Degree, Certificate of Achievement and Certificate of Proficiency requirements are listed in Section 6 (green pages).
Associate Degrees for transfer IGETC and CSUGE requirements are listed in Section 7 (green pages).

Any student wishing to earn an A.S. 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 56, 60, 110, 115, 120, 130, 135 and 140 must participate in the mathematics placement process or meet the prerequisite listed in the catalog. The assessment and placement process determines eligibility for enrollment in these courses.

COURSE OFFERINGS

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

MATH 1   Support for Exploring Mathematics   (.5)
1½ hours laboratory
Corequisite: MATH 100
Non-degree Applicable
A review of core prerequisite skills, competencies, and concepts for Exploring Mathematics (Math 100). Designed to provide just-in-time support for students concurrently enrolled in Math 100. Throughout the course, college success content will be integrated with mathematics topics. This course incorporates active learning techniques involving multiple modalities that include individual and/or group active learning projects/activities and/or student presentations.

MATH 6   Support for Beginning/Intermediate Algebra   (2)
2 hours lecture
Corequisite: MATH 56
Note: Pass/No Pass grading only
Non-degree Applicable
A review of the core prerequisite skills, competencies, and concepts for intermediate algebra. Intended as just in time support for students who are concurrently enrolled in MATH 56, Beginning/Intermediate Algebra. Review topics include Pre-Algebra and Beginning Algebra skills and concepts. Throughout the course, college success content will be integrated with mathematical topics. Course includes active learning techniques involving multiple modalities that include individual and/or group active learning projects/activities and/or student presentations.

MATH 11   Support for College Algebra   (2)
2 hours lecture
Prerequisite: *Eligibility determined through the Math placement process*
Corequisite: *MATH 110*
Note: *Pass/No Pass grading only*
Non-degree Applicable
A review of core prerequisite skills, competencies and concepts for College Algebra. Designed to provide just-in-time support to students concurrently enrolled in Math 110, College Algebra. Throughout the course, college success content will be integrated with mathematical topics. Course includes active learning techniques involving multiple modalities that include individual and/or group active learning projects/activities and/or student presentations.

MATH 13   Just-In-Time Support for Calculus for
              Business and the Social Sciences   (2)
2 hours lecture
Prerequisite: *Eligibility determined through the Math placement process*
Corequisite: *MATH 130*
Note: *Pass/No Pass grading only*
Non-degree Applicable
A review of the core prerequisite skills, competencies, and concepts for Calculus for Business and the Social Sciences. Intended as just in time support for students who are concurrently enrolled in MATH 130, Calculus for Business and the Social Sciences. Review topics include College Algebra skills and concepts. Throughout the course, college success content will be integrated with mathematical topics. Course includes active learning techniques involving multiple modalities that include individual and/or group active learning projects/activities and/or student presentations.

MATH 14   Support for Quantitative Reasoning   (2)
2 hours lecture
Corequisite: *MATH 101*
Note: *Pass/No Pass grading only*
Non-degree Applicable
The fundamental skills needed to understand the concepts, formulas and graphs used in Math 101, Quantitative Reasoning, are studied. This course includes operations with and conversions between fractions, decimals and percents. Algebraic reasoning will include working with variables, translating verbal expressions into variable expressions, exponents, square roots, graphing functions in the coordinate plane and solving linear equations. Throughout the course, college success content will be integrated with mathematical topics.

MATH 20   Statistics Support for Elementary Statistics   (2)
2 hours lecture
Corequisite: *MATH 120*
Note: *Pass/No Pass grading only*
Non-degree Applicable
The core mathematical skills needed to understand the concepts, formulas, and graphs used in transfer-level statistics are studied. This course integrates numeracy, proportional reasoning, algebraic reasoning, and functions. It develops conceptual and procedural tools that support the use of key mathematical concepts in a variety of statistical contexts. Throughout the course, college success content will be integrated with mathematical topics.

MATH 53   Prealgebra/Beginning Algebra   (6)
6 hours lecture
Prerequisite: *Eligibility determined through the math placement process.*
Elementary algebra with a review of selected topics from prealgebra. Emphasizes mathematical reasoning, problem-solving, and real-world applications using numeric, algebraic, and graphic models. Topics include number sense, percents, ratio and proportion, basic geometric concepts, problem-solving techniques, algebraic expressions, polynomials, linear equations, linear inequalities, linear and nonlinear graphs, systems of linear equations in two variables, integer exponents, and radicals.

MATH 54   Algebra for Statistics   (6)
6 hours lecture
Prerequisite: *Eligibility determined through the math placement process.*
The core algebra skills needed to understand the concepts, formulas, and graphs used in transfer-level statistics are investigated. Integrates numeracy, proportional reasoning, algebraic reasoning, and functions. Develops conceptual and procedural tools that support the use of key mathematical concepts in a variety of contexts. Throughout the course, college success content will be integrated with mathematical topics. This course is NOT intended for math, science, computer science, business, or engineering majors.

MATH 55   Geometry   (4)
4 hours lecture
Prerequisite: *A minimum grade of 'C' in either MATH 50, MATH 50B, or MATH 53 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
Prerequisite: *A minimum grade of 'C' in MATH 50 or MATH 50B, or MATH 53 or 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 course numbers 100-120.

MATH 60   Intermediate Algebra   (4)
4 hours lecture
Prerequisite: *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 75   STEM Prep Math I   (2)
2 hours lecture
Prerequisite: *Eligibility determined through the math placement process*
Corequisite: *MATH 110*
STEM Prep Math I provides an introduction to functions for students who plan on taking calculus courses or pursuing science, technology, engineering, or mathematics coursework that requires a thorough knowledge of functions and algebraic reasoning. This course provides just-in-time support for college level math skills and concepts in College Algebra. Focus is on function notation, operations and multiple representations of functions including linear, quadratic, exponential and log functions, as well as contextualized problem solving both individually and in teams. This course is designed to be taken concurrently with College Algebra in the first semester of an accelerated pathway to Calculus.

MATH 76   STEM Prep Math II   (1)
3 hours laboratory
Corequisite: *MATH 115*
STEM Prep Math II provides an introduction to algebraic and geometric reasoning for students who plan on taking calculus courses or pursuing science, technology, engineering, or mathematics coursework that requires a thorough knowledge of functions and algebraic reasoning. This course provides just-in-time support for college level math skills and concepts in Trigonometry. Focus is on function notation, operations and multiple representations of functions, formulas and functions defined geometrically, as well as contextualized problem solving both individually and in teams. This course is designed to be taken concurrently with Trigonometry in the second semester of an accelerated pathway to Calculus.

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 and/or laboratory may be scheduled by the department. Refer to Class Schedule.
Prerequisite: *A minimum grade of 'C' in either MATH 50, MATH 50B, or MATH 53 or eligibility determined through the Math Placement process*
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 or*
Coerequisite: *MATH 1*
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 101   Quantitative Reasoning   (3)
3 hours lecture
Transfer acceptability: *CSU/UC*
A minimum grade of 'C' in MATH 60, MATH 56 or eligibility determined through the math placement process
This course is designed to give students mathematical tools for understanding the modern world. The course includes linear and exponential functions to model growth and decay processes and the effect of compounding interest in personal finance situations. Elementary probability theory to calculate the likelihood of events and descriptive statistics will be used to organize and make sense of data sets.

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*
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, one course.*
C-ID MATH 151
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*
The trigonometric functions and their applications including emphasis on the analytical aspects, identities, and trigonometric equations.

MATH 120   Elementary Statistics   (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 120, and PSYC/SOC 205, combined: maximum credit, one course*
The use of probability techniques, hypothesis testing and predictive techniques to facilitate decision-making. Topics include descriptive statistics, probability and sampling distributions, statistical inference, correlation and linear regression, analysis of variance, chi-square and t-tests, and application of technology for statistical analysis, including interpretation of the relevance of the statistical findings. Applications using data from disciplines including business, social sciences, psychology, life science, health science and education.

MATH 126   STEM Precalculus I - College Algebra   (4)
3 hours lecture – 3 hours laboratory
Prerequisite: *A minimum grade of 'C' in MATH 60, MATH 56 or eligibility determined through the math placement process*
Transfer acceptability: *CSU/UC*
The first course of a two-semester sequence designed to prepare STEM students for calculus. The course covers advanced algebra topics, including functions and their properties. Focus is on linear, quadratic, polynomial, rational, exponential and logarithmic functions, and systems of equations and inequalities, including rate of change and explicit covariational reasoning to investigate and explore relationships between quantities and how these relationships change. Students solve contextualized problems individually and in teams to gain a deeper understanding of functions and their applications.

**MATH 127   STEM Precalculus II - Trigonometry and
                 Analytic Geometry   (4)**
3 hours lecture – 3 hours laboratory
Prerequisite: *A minimum grade of 'C' in MATH 126, MATH 110 or eligibility determined through the math placement process*
Transfer acceptability: *CSU/UC*
The second course in a two-semester sequence designed to prepare STEM students for calculus. This course covers basic concepts of analytic geometry and trigonometry, including definitions and properties of trigonometric functions. Students use multiple representations of functions, rate of change and explicit covariational reasoning to investigate and explore relationships between quantities and how these relationships change. Topics include solutions of applied problems using right triangles, graphs of trigonometric functions, trigonometric identities, trigonometric equations, inverse trigonometric functions, polar coordinates, conics, systems of nonlinear equations and sequences and series. Students model and solve contextualized problems individually and in teams to gain a deeper understanding of analytic geometry, trigonometric functions, and applications.

MATH 130   Calculus for Business and the Social Sciences (4)
4 hours lecture
Prerequisite: *A minimum grade of 'C' in MATH 110 or MATH 126 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*
C-ID MATH 140
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, one course.
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 110 and MATH 115 or MATH 127 or MATH 135 or eligibility determined through the math placement process
Transfer acceptability: CSU; UC – MATH 130 and 140 combined: maximum credit, one course
C-ID MATH 211
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
C-ID MATH 221
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 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 and/or 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
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
C-ID MATH 250
Matrices, determinants, vectors, linear dependence and independence, basis and change of basis, linear transformations, and eigenvalues.

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
C-ID MATH 230
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
C-ID MATH 240
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 and CSCI 112
Transfer acceptability: CSU; UC
The study of prepositional 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, graphs and trees, and applications directed to the field of computer science.

Medical Assisting
See Business (BUS)
Medical Assisting Clinical not offered at Palomar College

Military Leadership (AP ML)

COURSE OFFERINGS

MIL 100   Military Leadership Communications   (3)
3 hours lecture
Transfer acceptability: CSU
A comprehensive introduction to the study of military leadership communication processes for individual and team success in cross-cultural environments.

MIL 101   Military Warfighting Philosophy   (3)
3 hours lecture
Transfer acceptability: CSU
The theory and nature of war, deliberate planning processes, organization of joint warfighting organizations, and the Marine Corps role in decision-making and leadership at the tactical level.

MIL 103 Military Leadership Philosophy   (3)
3 hours lecture
Transfer acceptability: CSU
Introduction to the perceptions, cognitions and biases in ethical decision making processes as it pertains to military leadership.

MIL 199   Military Leadership Work Experience   (.5-6)
1½ hours lecture – 9 hours laboratory
Transfer acceptability: CSU
Supervised on the job training for all occupational students. Course is repeatable not to exceed a total of 16 units.

Multicultural Studies (MCS)

See also Africana Studies, American Indian Studies, American Studies, Chicano Studies, Judaic Studies

Contact the Multicultural Studies Department for further information.
760-744-1150, ext. 2206
Office: MD-354

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 124   Islamic Cultures and Traditions   (3)
3 hours lecture
Note: *Cross listed as RS 124*
Transfer acceptability: *CSU; UC*
An introductory course designed for students with a general interest in the Islamic world, including its history and cultural traditions. Examines the main social, traditional and legal institutions of Islam.

MCS 125   Women, Culture, and Islam   (3)
3 hours lecture
Transfer acceptability: *CSU; UC*
This course examines the history of women in Islamic societies from the advent of Islam in the 1st AH/7th CE to present day. Drawing on a variety of primary and secondary sources in written texts and from the Internet, this course explores the role of women in Islam as a religion, cultural experience, and tradition, along with the wide range of women's experiences throughout different periods of history and in diverse Muslim societies.

MCS 160   History of the Middle East from 600 to the Present   (3)
3 hours lecture
Recommended Preparation: *HIST 107*
Note: *Cross listed as HIST 160*
Transfer acceptability: *CSU; UC*
History of the Middle East from the origins of Islam to contemporary times. Topics include the political, social, and economic development of Islam, the early caliphates, the Crusades, the Ottoman and Safavid empires, European imperialism, and modern Middle Eastern states.

MCS 165   Introduction to Asian American Studies   (3)
3 hours lecture
Transfer acceptability: *CSU; UC*
This course is an introduction to Asian American Studies. It focuses on the lives and experiences of Asian Americans in the United States. It surveys the history of immigration and cultural assimilation of the different Asian American groups in the U.S. As such, the course will utilize historical perspectives, literature, and film to examine the Asian American experience and the changing roles and contributions of Asian Americans in American society.

MCS 197   Multicultural Studies Topics   (.5 - 4)
Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture and/or laboratory may be scheduled by the department. Refer to Class Schedule.
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 200/SOC 200*
Transfer acceptability: *CSU; UC*
C-ID SOCI 150
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)

See Noncredit Music (N MUS) for noncredit Music Courses

Contact the Performing Arts Department for further information.
760-744-1150, ext. 2316
Office: PAC-122
Associate Degree, Certificate of Achievement and Certificate of Proficiency requirements are listed in Section 6 (green pages).

COURSE OFFERINGS

State Regulations (Title 5, Sections 55040-55041) limit the number of times a student may take courses with related content and similar primary educational activities. Therefore, some combinations of course work in Music have limitations on the number of times a student may enroll. Some Music courses may be repeated provided student has not reached the limitation for the applicable group of Music courses. Specific information about enrollment limitations for Music classes is available at http://www.palomar.edu/schedule/restrictions.htm

Courses numbered under 100 are not intended for transfer credit.

MUS 90   Fundamental Preparation for Music Majors   (2)
1½ hours lecture - 1½ hours laboratory
Designed as the entry-level music fundamentals class for music majors, including basic music terminology, rhythm and pitch notation, clefs, scales, intervals and triads. Keyboard and aural skills will also be introduced, along with a concise outline of the major style periods of music history. The ability to read music is strongly recommended and desirable. Provides essential background for advanced courses in music theory.

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 and/or laboratory may be scheduled by the department. Refer to Class Schedule.
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*
C-ID MUS 100
A survey course that develops musical listening skills through lectures, discussion, in-class listening to recorded music, and live concert attendance. Stylistic and structural elements, cultural roles of music and musicians, and contributions of technology in Western music are examined through representational works from the earliest notated music to the present.

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 historical and musical development of jazz as a unique African American expression from the beginning of slavery in the U.S. to the current global multicultural expression of jazz in the twenty-first century. Emphasis is placed on how racial, socio-economic, and gender relationships between whites, African Americans and Latinos were reflected in and influenced by jazz musicians, and the evolving technological contexts in which jazz has developed. Students become active listeners, and develop culturally relevant aesthetic criteria in contextualizing 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 - 1 hour laboratory
Prerequisite: MUS 103 or Demonstrated ability to read music acquired through prior study (i.e. private lessons or AP Music Theory)
Transfer acceptability: CSU; UC
C-ID MUS 120
Through guided composition and analysis, this course incorporates the following concepts: rhythm and meter, basic properties of sound, intervals, diatonic scales and triads, diatonic chords, basic cadential formulas and phrase structures, figured bass symbols, dominant seventh chords, non-harmonic tones, and voice leading in 4-part chorale writing. Development of skills in handwritten notation is expected. Includes review of music rudiments. Keyboard component including scales, triads, inversions and chord progressions.

MUS 106   Music Theory II   (3)
3 hours lecture - 1 hour laboratory
Prerequisite: A minimum grade of 'C' in MUS 105
Corequisite: MUS 111
Transfer acceptability: CSU; UC
C-ID MUS 130
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 - 1 hour laboratory
Corequisite: MUS 105
Recommended Preparation: Demonstrated ability to read music acquired through prior study (i.e. private lessons or AP Music Theory)
Transfer acceptability: CSU; UC
C-ID MUS 125
Melodic and rhythmic sight reading and dictation. Required concert attendance. Required for students with a major in music.

MUS 111   Music Skills II   (1)
1 hour lecture - 1 hour laboratory
Prerequisite: A minimum grade of 'C' in MUS 110
Transfer acceptability: CSU; UC
C-ID MUS 135
Continuation of MUS 110 and harmonic dictation. Required concert attendance. Required for students with a major in music.

MUS 115   Basic Keyboard I   (.5)
2 hours laboratory
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   (1)
3 hours laboratory
Prerequisite: Ability to read music in treble and bass clefs
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   (.5)
2 hours laboratory
Prerequisite: A minimum grade of 'C' in MUS 115 or the passing of equivalency test
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   (.5)
2 hours laboratory
Prerequisite: A minimum grade of 'C' in MUS 117 or the passing of equivalency test
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 130   Fundamental Vocal Skills   (.5)
2 hours laboratory
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   (.5)
2 hours laboratory
Prerequisite: A minimum grade of 'C' in MUS 130
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 137   Cuban and Brazilian Drumming I   (.5 - 1)
1½, 2, or 3 hours laboratory
Note: Cross listed as DNCE 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, popular and folkloric; Rumba, Congo (Makuta/Palo), Franco/Haitian (Gaga/Congo Layet) from East and West Cuba. Develop ability to work as a drum ensemble.

MUS 138   Cuban and Brazilian Drumming II   (.5 - 1)
1½, 2, or 3 hours laboratory
Limitation on enrollment: Enrollment subject to audition
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 148   Palomar Chorale   (1)
3 hours laboratory
Limitation on enrollment: Enrollment subject to audition
Transfer acceptability: CSU; UC
C-ID MUS 180
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
Limitation on enrollment: *Enrollment subject to audition*
Transfer acceptability: *CSU; UC*
C-ID MUS 180
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)
1 ½ or 3 hours laboratory
Limitation on enrollment: *Enrollment subject to audition*
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
Limitation on Enrollment: *Enrollment subject to audition*
Transfer acceptability: *CSU; UC*
C-ID MUS 180
Study, rehearsal, and performance of standard concert band music.

MUS 152   Jazz Ensemble   (1)
3 hours laboratory
Limitation on enrollment: *Ability to perform on one or more instruments and read music. Enrollment subject to audition*
Transfer acceptability: *CSU; UC*
C-ID MUS 180
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
Limitation on Enrollment: *Enrollment subject to audition*
Transfer acceptability: *CSU; UC*
C-ID MUS 180
Rehearsal and performance of chamber music literature for brass.

MUS 157   Guitar Ensembles   (1)
3 hours laboratory
Limitation on enrollment: *Enrollment subject to audition with emphasis on music reading*
Transfer acceptability: *CSU; UC*
C-ID MUS 180
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)
1 ½ or 3 hours laboratory
Limitation on enrollment: *Enrollment subject to audition with emphasis on vocal ability and music reading*
Transfer acceptability: *CSU; UC*
C-ID MUS 180
Rehearsal and performance of chamber music for voices.

MUS 159   Musical Theatre Orchestra   (.5,1)
1 ½ or 3 hours laboratory
Limitation on enrollment: *Enrollment subject to audition; ability to play an instrument and read music at sight*
Transfer acceptability: *CSU; UC*
Rehearsal and performance of musical theatre literature. Attendance at all scheduled productions is required.

MUS 161   Summer Concert Band   (.5)
1 ½ hours laboratory
Prerequisite: *Ability to perform on one or more instruments*
Transfer acceptability: *CSU; UC*
Study, rehearsal, and performance of standard concert band music.

MUS 169   History of Rock Music   (3)
3 hours lecture
Transfer acceptability: *CSU; UC*
Overview of rock and popular musical styles from the early 1950s to the present. Coverage includes related social and cultural trends, outstanding artists, the influence of technology on popular music, and relevant trends in the music industry. Basic musical concepts such as pitch, rhythm and form will be introduced and applied to the music under consideration.

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
Limitation on enrollment: *Enrollment subject to audition*
Transfer acceptability: *CSU*
C-ID MUS 180
Study and preparation of professional level materials for the large jazz ensemble.

MUS 173   Musical Theatre Scenes I   (1)
3 hours laboratory
Note: *Cross listed as DNCE 173/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 174   Musical Theatre Scenes II   (3)
3 hours lecture
Prerequisite: *A minimum grade of 'C' in DNCE/MUS/TA 173*
Note: *Cross listed as DNCE 174/TA 174*
Transfer acceptability: *CSU*
A continuation of Musical Theatre Scenes I. A deeper exploration into the acting, singing, and dancing necessary for Broadway Musicals from the 1930's to present.

MUS 175   Beginning Guitar   (.5)
2 hours laboratory
Transfer acceptability: *CSU; UC*
An introduction to the fingerboard through the study of notation, basic hand positions, and chord formations.

MUS 176   Intermediate Guitar   (.5)
2 hours laboratory
Prerequisite: *A minimum grade of 'C' in MUS 175*
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 178   Classical Guitar   (1)
3 hours laboratory
Recommended Preparation: *A minimum grade of 'C' in MUS 175 or approval of instructor*
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 179   Beginning Flamenco Guitar   **(.5)**
2 hours laboratory
Prerequisite: Basic knowledge of guitar performance technique
Transfer acceptability: CSU; UC
Basic knowledge of flamenco guitar that focuses on terminology, harmony, rhythm, and additional techniques.

MUS 180   Computer Music I   **(3)**
3 hours lecture
Prerequisite: A minimum grade of 'C' in MUS 103 or 115 or ARTI 246 or GCMW 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)**
3 hours lecture
Prerequisite: A minimum grade of 'C' in MUS 180, 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 182, ART 182, DNCE 182, 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: A minimum grade of 'C' in AMS/ART/DNCE/TA 182
Note: Cross listed as AMS 183/ART 183/DNCE 183/TA 183
Transfer acceptability: CSU
Practical experience in arts management in the visual and performing arts.

MUS 184   Electronic Ensemble   **(1)**
3 hours laboratory
Prerequisite: A minimum grade of 'C' in MUS 103
Transfer acceptability: CSU; UC
C-ID MUS 180
Instruction in music technology, composition, and performance. Students will compose and participate in performances of original works for electronic, computer, and acoustic instruments. Assignments and performances will be both individual and collaborative. Group, or ensemble, compositions and performances are part of this course.

MUS 187   Computer Music Composition   **(1)**
3 hours laboratory
Prerequisite: A minimum grade of 'C' in MUS 103 or MUS 115, and MUS 180 and MUS 181
Transfer acceptability: CSU
Focus is on individual music compositions. Instruction will include, but is not limited to, computer music software and hardware overviews. Includes composition and notation techniques, music analysis, detailed work on specific software applications, music publishing information, and rehearsal and part preparation. Students may also take this in conjunction with computer music classes in order to receive further tutelage with that class material.

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 and/or laboratory may be scheduled by the department. Refer to Class Schedule.
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
Limitation on enrollment: Enrollment subject to audition
Transfer acceptability: CSU; UC
C-ID MUS 180
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 1 hour laboratory
Prerequisite: A minimum grade of 'C' in MUS 106
Corequisite: MUS 215
Transfer acceptability: CSU; UC
C-ID MUS 140
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 - 1 hous laboratory
Prerequisite: A minimum grade of 'C' in MUS 210
Corequisite: MUS 216
Transfer acceptability: CSU; UC
C-ID MUS 150
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 - 1 hour laboratory
Prerequisite: A minimum grade of 'C' in MUS 111
Transfer acceptability: CSU; UC
C-ID MUS 145
Continuation of MUS 111 and four part harmonic dictation. Introduction to chromatic dictation. Required for students with a major in music.

MUS 216   Music Skills IV   **(1)**
1 hour lecture - 1 hour laboratory
Prerequisite: A minimum grade of 'C' in MUS 215
Transfer acceptability: CSU; UC
C-ID MUS 280
Continuation of MUS 215 and contrapuntal dictation. Required for students with a major in music, but open to all students.

MUS 220   Applied Music   **(1)**
1 hous lecture
Corequisite: MUS 222 and at least one music ensemble (MUS 134, 147, 148, 149, 150, 151, 152, 155, 157, 158, 159, 172, 184, 198)
Limitation on Enrollment: Enrollment subject to audition
Transfer acceptability: CSU; UC
C-ID MUS 160
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   (.5)
2 hours laboratory
Corequisite: MUS 220
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 223   Premier Chamber Ensembles   (1)
3 hours laboratory
Limitation on enrollment: *Enrollment subject to audition*
Transfer acceptability: CSU; UC
Chamber music ensembles for advanced performers. Enrollment subject to audition.

MUS 224   Introduction to Jazz Piano   (.5)
2 hours laboratory
Prerequisite: A minimum grade of 'C' in MUS 117 or the passing of equivalency test
Transfer acceptability: CSU; UC
Provides students with a practical knowledge and proficiency in concepts pertaining to jazz piano, including reading chord symbols, chord voicings, stylistically appropriate accompaniment, and improvising in a jazz and/or pop music idiom.

MUS 225   Piano Skills II   (.5)
2 hours laboratory
Prerequisite: A minimum grade of 'C' in MUS 119 or the passing of equivalency test
Transfer acceptability: CSU; UC
Continuation of piano techniques with emphasis on improvised accompaniments, sight reading, ensemble playing, pedaling, and practice techniques.

MUS 250   Choral Conducting   (1)
1 hour lecture
Prerequisite: A minimum grade of 'C' in MUS 105 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)**
½, 1, 1½, 2, or 3 hours lecture
Prerequisite: A minimum grade of 'C' in 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.

MUS 280   Music Composition Workshop I   (1)
3 hours laboratory
Prerequisite: Completion of, or concurrent enrollment in MUS 105
Transfer acceptability: CSU; UC
Survey of contemporary techniques in music composition, music notation and contemporary literature. Short compositions in workshop setting for beginning composers.

MUS 281   Music Composition Workshop 2   (1)
3 hours laboratory
Prerequisite: MUS 280
Transfer acceptability: CSU; UC
Focus on contemporary techniques in music composition, music notation and contemporary literature. Students create compositions in a workshop setting. This course is for intermediate level composers.

MUS 283   Musical Theatre Scenes III   (1)
3 hours laboratory
Note: *Cross listed as DNCE/TA 283*
Transfer acceptability: CSU
A continuation of Musical Theatre scenes II with emphasis on more advanced acting, singing and dance techniques.

MUS 284   Musical Theatre Scenes IV   (1)
3 hours laboratory
Prerequisite: DNCE 283
Note: *Cross listed as DNCE/TA 284*
Transfer acceptability: CSU
Exploring the rehearsing and performing of Musical Theatre acting, singing, and dancing at the advanced level.

MUS 297   Experimental Topics in Music   (.5 -3)
Units awarded in topics courses are dependent upon the number of hours required of the student. Any number of laboratory hours may be scheduled by the department. Refer to Class Schedule.
Prerequisite Enrollment subject to project approval.
Transfer acceptability: CSU; UC - credit determined by UC upon review of course syllabus.
Advanced music projects including individual research, tutoring and performance for college classes and community projects.

Networking
See CSIT - Networking

Nursing Education (NURS)

Contact the Nursing Education Department for additional information.
760-744-1150, ext. 2279
Office: HS-200
Associate Degree, Certificate of Achievement and Certificate of Proficiency requirements are listed in Section 6 (green pages).
For transfer information, consult a Palomar College Counselor.

The Associate Degree Nursing program is approved by the California Board of Registered Nursing and is accredited by the Accreditation Commission for Education in Nursing (ACEN), Peachtree Rd. NE, Suite 850, Atlanta, GA 30326, 1-404-975-5000.

GENERAL INFORMATION

The Associate Degree Nursing program prepares graduates to provide direct nursing care to patients in hospitals and other health agencies at 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.

Palomar College has two Associate Degree options available in Nursing. The difference in the coursework between the two options is in the GE requirements, which are described in more detail in the programs of study on the following pages. The Associate in Arts (AA) in Nursing Degree meets the requirements of Title V and the Board of Registered Nursing (BRN). The Associate in Science (AS) in Nursing Degree meets the requirements of Title V, Board of Registered Nursing (BRN), and the Accreditation Commission for Education in Nursing (ACEN).

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) have a GPA of 2.5 in prerequisite sciences; (5) pass the Test of Essential Academic Skills (TEAS), version V, with a composite score of at least 62%; and (6) submit a completed application along with the required documentation.

LICENSURE: Upon successful completion of either the Associate in Arts (AA) in Nursing Degree or the Associate in Science (AS) in Nursing Degree, students will be eligible to apply to take the National Council Licensure Examination for Registered Nurses (NCLEX RN). If performance on the examination is successful, they will be licensed as a registered nurse.

Students who are LVNs and who are electing the Non-Degree 30 Unit Option, as well as students who do not complete the requirements for the Associate in Arts (AA) or the Associate in Science (AS) in Nursing 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. If successful, they will be licensed as a RN by the California Board of Registered Nursing. Endorsement of a non-degree graduate RN in other states is not guaranteed because these regulations are unique to California. ONCE THE LICENSING EXAM IS TAKEN, STATUS CANNOT BE CHANGED FROM NON-DEGREE TO DEGREE REGARDLESS OF SUBSEQUENT DEGREES EARNED.

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.

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 appropriate 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 Nursing Education Department'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.

STUDENTS WITH A PREVIOUS BACHELOR'S DEGREE: As per the Education Code, SB 1393, students with baccalaureate or higher degrees from a regionally accredited college in a non-nursing field are only required to complete the course work necessary for completion of the registered nursing program, including prerequisites and nursing coursework. These students are not required to complete any other courses required by the college for an associate degree.

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. For information contact the Nursing Education Department (760) 744-1150, ext. 2580.

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*
An introduction to concepts essential to nursing practice. Topics include, but are not limited to, nursing process, critical thinking, therapeutic communication, and health assessment using a functional health patterns framework. Multicultural considerations including gender, ethnicity, sexuality, and age are explored.

NURS 110   LVN-RN Transition   (2)
1 hour lecture - 3 hours laboratory
Prerequisite: *A copy of a current, active California LVN license in good standing must be on file in the Nursing Education Office prior to registering this class.*
Recommended preparation: *MATH 56 or 60*
Note: *Graded only*
Transfer acceptability: *CSU*
This course facilitates the transition of the Licensed Vocational Nurse into the Associate Degree Nursing Program. Topics include, but are not limited to, nursing process, critical thinking, health assessment utilizing evidence based interventions, and role differentiation. Multicultural considerations including ethnicity, gender, age, and sexuality are explored. Concepts essential for registered nursing practice and functional health patterns are examined.

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*
Theoretical concepts of nursing fundamentals and basic medical-surgical nursing. Concepts related to delegation, resource, and time management are introduced. Students apply therapeutic communication techniques when utilizing the nursing process, critical thinking, and evidence based interventions in the care of clients in the clinical setting. Students provide care to chronic stable medical-surgical adult clients with expected or predictable outcomes.

NURS 118   Nursing II   (8)
4 hours lecture - 12 hours laboratory
Prerequisite: *A minimum grade of 'C' in NURS 103 and 117*
Corequisite: *NURS 203*
Note: *Graded only*
Transfer acceptability: *CSU*
Builds on Nursing 117 with the application of the nursing process and critical thinking in the care of childbearing families, pediatric, and medical-surgical clients. Theoretical content related to growth and development, child abuse, and human sexuality is included. Concepts are expanded to include the recognition of changes in clients with predictable outcomes. Emphasis is placed on client teaching and the integration of family members in the plan of care. Managerial concepts of delegation, collaboration, time management, and appropriate utilization of resources are developed.

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 anticonclusive agents; antipsychotic agents; cardiovascular agents; renal agents; anti-infective agents vaccinations; and antineoplastic agents.

NURS 140   Adult Health Assessment   (1)
1 hours lecture
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 and/or laboratory may be scheduled by the department. Refer to Class Schedule.
Transfer acceptability: *CSU*
Topics in Nursing. See Class Schedule for specific topic offered. Course title will designate subject covered.

NURS 203   Nursing Foundation II   (1)
1 hour lecture
Prerequisite: *. NURS 103 or NURS 117 or LVN License by Board of Registered Nursing*
Corequisite: *NURS 118 or NURS 217*
Note: *Graded only*
Transfer acceptability: *CSU*
Builds on the foundation of Nursing 103 and 110. Critical thinking is utilized as a method to explore historical, political, educational, legal, ethical, and bioethical issues that impact nursing practice. Nursing organizations are researched via the internet with an emphasis on evaluation of nursing websites. Managerial concepts are introduced with a focus on decision making skills, managing resources, organizing time, delegating, and supervising care.

NURS 217   Nursing III   (8.5)
4 hours lecture-13½ hours laboratory
Prerequisite: *A minimum grade of 'C' in NURS 118 or Admission to the Associate Degree Nursing Program (LVN-RN) or Admission to the non-degree program LVN-RN (30-unit option) and a minimum grade of 'C' in NURS 203, or concurrent enrollment in NURS 203.*
Note: *Graded only*
Transfer acceptability: *CSU*
Builds on the first year of the program as a process for the development of complex thinking and decision making while caring for medical-surgical, gerontologic, and psychiatric clients. Theoretical concepts are expanded to include identification and prioritization of evidence based interventions for clients who have unpredictable outcomes or who demonstrate changes in health status. Students collaborate with the interdisciplinary team to manage and modify care of clients.

NURS 218   Nursing IV   (8)
3½ hours lecture-13½ hours laboratory
Prerequisite: *A minimum grade of 'C' in NURS 203 and 217*
Note: *Graded only*
Transfer acceptability: *CSU*
Builds on Nursing 217 expanding nursing practice and critical thinking in the promotion, maintenance, and restoration of health for a group of clients. Students use evidence-based interventions and complex decision-making when caring for acutely ill medical-surgical clients with unstable health problems. Students work collaboratively with the interdisciplinary team to manage and coordinate care for a group of clients. Emphasis is placed on student roles as coordinators, facilitators, and client advocates as they progress toward a competent entry level nursing practice.

NURS 295   Directed Study in Nursing   (1, 2, 3)
3, 6, or 9 hours laboratory
Prerequisite: *Approval of proposal by the department chairperson*
Note: *Pass/No Pass grading only*
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 (NUTR)

Contact the Design and Manufacturing Technologies Department for further information.
760-744-1150, ext. 2349
Office: DR-5

For transfer information, consult a Palomar College Counselor.

NUTR 100   Introduction to Nutrition and Food Professions   (3)
3 hours lecture
Transfer acceptability: *CSU*
Overview of nutrition, food science, dietetics, and fitness professions and disciplines. Employment trends, career options, educational paths, ethical issues, and professional networking will be emphasized. Introduction to professional organizations and publications will be discussed.

NUTR 120   Food and Culture   (3)
(Formerly FCS 150)
3 hours lecture
Transfer acceptability: *CSU*
Exploration of food as an expression of cultural diversity, and examination of how traditional foods reflect geographic area and culture. Regional, ethnic, cultural, religious, historical, and social influences on food patterns are examined. Influence of socio-economic class, beliefs, gender, and age on diet, health, and disease are also discussed.

NUTR 165   Fundamentals of Nutrition   **(3)**
(Formerly FCS 165)
3 hours lecture
Note: Cross listed as HE 165. Nutrition majors should contact a Nutrition advisor (x2345) to determine if NUTR/BIOL 185 is the right course for you.
Transfer acceptability: CSU; UC – NUTR 165, NUTR 185, BIOL 185, HE 165 combined: maximum credit, one course
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.

NUTR 185   Science of Human Nutrition   **(3)**
(Formerly FCS 185)
3 hours lecture
Prerequisite: BIOL 100 or BIOL 101 and CHEM 100 or CHEM 110 and CHEM 110L
Note: Cross listed as BIOL 185
Transfer acceptability: CSU; UC – NUTR 165, NUTR 185, BIOL 185, HE 165 combined: maximum credit, one course
C-ID NUTR 110
Science of food, nutrients, and other substances. Processes by which humans ingest, digest, absorb, transport, utilize, and excrete foods and nutrients are explored. Emphasis on biological, chemical, and physiological implications to human nutrition and overall health. Current nutrition recommendations and controversies are analyzed from a scientific perspective.

NUTR 197   Topics in Nutrition   **(0.5 - 3)**
½ -3 hours lecture - 1½-9 hours laboratory
Transfer acceptability: CSU
Topics in Nutrition. See Class Schedule for specific topics offered. Course title will designate subject covered.

Oceanography (OCN)

Contact the Earth, Space, and Environmental Sciences Department for further information.
760-744-1150, ext. 2512
Office: NS-110

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: A minimum grade of 'C' in OCN 100, 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.

Office Information Systems (OIS)
See Business (BUS)

Philosophy (PHIL)

Contact the Behavioral Sciences Department for further information.
760-744-1150, ext. 2329
Office: MD-241
Associate Degree, Certificate of Achievement and Certificate of Proficiency requirements are listed in Section 6 (green pages).
Associate Degrees for transfer IGETC and CSUGE requirements are listed in Section 7 (green pages).

COURSE OFFERINGS

PHIL 111   Introduction to Philosophy   **(3)**
3 hours lecture
Recommended preparation: Eligibility for ENG 100
Transfer acceptability: CSU; UC
C-ID PHIL 100
Introduces philosophical ideas and methods concerning knowledge, reality and values. Expected topics will include the sources and limits of knowledge, and the nature of reality. Other topics that may be examined from a philosophical perspective include the nature of the self, truth, ethics, religion, science, language, beauty and art, political theory, or mind.

PHIL 113   Reasoning About Philosophical Issues   **(3)**
(Formerly PHIL 102)
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 114   Asian Philosophies   **(3)**
(Formerly PHIL 110)
3 hours lecture
Recommended preparation: Eligibility for English 100.
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 116   Introduction to Logic   **(3)**
(Formerly PHIL 120)
3 hours lecture
C-ID PHIL 110
Transfer acceptability: CSU; UC
Introduces some principles of valid reasoning with emphasis on deductive logic. Must include a study of formal techniques of sentential logic. May also include a treatment of inductive reasoning, language, or fallacies.

PHIL 121   Introduction to Ethics   **(3)**
3 hours lecture
Recommended preparation: Eligibility for English 100
Transfer acceptability: CSU; UC
C-ID PHIL 120
Examines the concepts of good and evil, right and wrong, and theories of individual ethical responsibility. The course may also apply ethical theories to examine various social issues such as war, abortion, gun control, euthanasia, racism, and sexism.

PHIL 122   Social and Political Philosophy   (3)
3 hours lecture
Recommended preparation: Eligibility for ENG 100
Transfer acceptability: CSU; UC
Introduction to philosophy focusing on the central issues of society and politics, such as the nature and justification of political authority, citizenship, law, justice (distributive and retributive), power, the limits of government and individual liberty. These issues are examined through classic and contemporary texts in the history of political philosophy.

PHIL 125   Philosophy of Human Nature   (3)
(Formerly PHIL 103)
3 hours lecture
Recommended preparation: Eligibility for ENG 100
Transfer acceptability: CSU; UC
Survey course of theories of human nature and their presuppositions and implications. Presuppositions about human nature underlie religious, political, ethical, psychological, sociological, and scientific theories and contemporary debates in these fields. Students will read primary texts drawn from various disciplines, cultures, and/or historical periods with the goals of understanding the theories of human nature and learning how to critically evaluate them.

PHIL 126   Philosophy of Religion   (3)
(Formerly PHIL 105)
3 hours lecture
Recommended preparation: Eligibility for English 100.
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.

PHIL 140   History of Ancient Philosophy   (3)
(Formerly PHIL 135)
3 hours lecture
Recommended Preparation: Eligibility for English 100.
Transfer acceptability: CSU; UC
C-ID PHIL 130
Addresses ancient philosophy. Emphasis will be on the development of Greek philosophy from the Pre-Socratics through Aristotle. May also include Hellenistic, Roman, medieval or non-western thinkers.

PHIL 141   History of Modern Philosophy   (3)
(Formerly PHIL 136)
3 hours lecture
Recommended Preparation: Eligibility for English 100.
Transfer acceptability: CSU; UC
C-ID PHIL 140
Addresses 16th through 18th century philosophy. Emphasis will be on broad epistemological and/or metaphysical developments of empiricism and rationalism in philosophical thought from Descartes to Kant. May include approximate precursors and successors.

PHIL 142   Contemporary Philosophical Movements   (3)
(Formerly PHIL 130)
3 hours lecture
Recommended preparation: Eligibility for English 100.
Transfer acceptability: CSU; UC
A critical examination of philosophical movements that have 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 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 and/or laboratory may be scheduled by the department. Refer to Class Schedule.
Transfer acceptability: CSU
Topics in Philosophy. See Class Schedule for specific topic covered. Course title will designate subject covered.

PHIL 200   Critical Thinking   (3)
(Formerly PHIL 115)
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 201   Symbolic Logic   (3)
3 hours lecture
Prerequisite: A minimum grade of 'C' in MATH 56 or MATH 60.
Transfer acceptability: CSU; UC
C-ID PHIL 210
Introduces the principles of valid deductive reasoning through the study of formal techniques of sentential logic and predicate logic.

PHIL 250   Philosophy in Literature   (3)
3 hours lecture
Transfer acceptability: CSU; UC
A study of philosophical concepts as they appear in the academic and nonacademic writings of philosophers, and in related writings by non-philosophers. The writings are examined from the perspectives of both philosophical analysis and cultural context. The works and thinkers studied vary from semester to semester. See the class schedule for the current semester's theme.

PHIL 295   Directed Study in Philosophy   (1, 2, 3)
1, 2, or 3 hours lecture
Prerequisite: Enrollment subject to project approval
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 Media Studies Department for further information.
760-744-1150, ext. 2440
Office: P-31
Associate Degree, Certificate of Achievement and Certificate of Proficiency requirements are listed in Section 6 (green pages).
For transfer information, consult a Palomar College Counselor.

COURSE OFFERINGS

Courses numbered under 100 are not intended for transfer credit.

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 Film and Darkroom Photography   (3)
1½ hours lecture - 4½ hours laboratory
Transfer acceptability: CSU; UC
Introduction to the mechanics, optics, chemistry, lighting principles, and practices of elementary photography using film. 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)
1½ hours lecture - 4½ hours laboratory
Prerequisite: A minimum grade of 'C' in PHOT 100 or PHOT 124
Transfer acceptability: CSU; UC
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 120   Digital Photography   (3)
1½ hours lecture - 4½ hours laboratory
Transfer acceptability: CSU
Introduction to theory, mechanics, optics, lighting principles, and practices of photography using Digital Cameras. Explores the history, aesthetics, and the conceptualization of photographic imagery. Photographic seeing is stressed. Includes practices and procedures for image capture, asset management, software developing, printing, finishing and presentation and critique. Students are required to have an adjustable digital camera with manual exposure and RAW format capabilities.

PHOT 124   Introduction to Film and Darkroom for
**   Digital Photographers   (3)**
1½ hours lecture - 4½ hours laboratory
Prerequisite: A minimum grade of 'C' in PHOT 120
Transfer acceptability: CSU
Introduces digital photographers to analog film and darkroom methods. Includes film camera mechanics and operations, chemistry, film development, darkroom principles and practices of elementary black and white film photography. Contemporary and historical photographic imagery will be viewed and discussed. Encourages the development of personal artistic expression and visual perception through various photographic assignments. The aesthetics of photography and the conceptualization of photographic imagery will also be addressed. Many types of film cameras will be acceptable for this class. A film camera is required and your instructor will describe appropriate cameras the first day of class.

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 130   Digital Darkroom I   (3)
1½ hours lecture - 4½ hours laboratory
Prerequisite: A minimum grade of 'C' in PHOT 120
Transfer acceptability: CSU
The technology of digital photography, the computer, and inkjet printers. Emphasis on industry standard image editing software as the primary photographic processing and manipulation tools. Continuing instruction in digital image processing directed toward photographic output. Development of capabilities and use of the digital darkroom.

PHOT 135   Digital Darkroom II   (3)
1½ hours lecture - 4½ hours laboratory
Prerequisite: A minimum grade of 'C' in PHOT 130
Transfer acceptability: CSU
A continuing investigation into the technology, theory and aesthetics of digital photography with instruction on advanced digital image processing from a photographic perspective. Emphasis will be on; creating outstanding imagery, perfecting output through the advance use of image editing software, and advancing visual literacy.

PHOT 140   Photojournalism   (3)
1½ hours lecture - 4½ hours laboratory
Note: Cross listed as JOUR 140
Recommended Preparation: PHOT 120
Transfer acceptability: CSU
C-ID JOUR 160
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 145   Advanced Photojournalism   (3)
1½ hours lecture - 4½ hours laboratory
Prerequisite: A minimum grade of 'C' in PHOT/JOUR 140
Transfer acceptability: CSU
Designed to further develop those skills learned in PHOT 140. Provides advanced-level staffing for the college newspaper, magazine, and website. Emphasizes the use of multimedia productions, such as slide shows and DSLR video.

PHOT 160   Photography: Professional Practices   (3)
3 hours lecture
Transfer acceptability: CSU
Prepares students for success in the photography world. Instruction and tactics on creating an operational plan, necessary paperwork, ethical issues, copywriting your photographs, working with clients and building the client base, pricing, invoicing, insurance and marketing. Appropriate for Commercial and Fine Art Photographers.

PHOT 171   Landscape and Culture   (3)
1½ hours lecture - 4½ hours laboratory
Prerequisite: A minimum grade of 'C' in PHOT 120
Transfer acceptability: CSU (pending)
A photographic exploration of the interaction, influences and impact connecting humans, nature and the landscape.

PHOT 209   Photographic Portfolio   (3)
1½ hours lecture - 4½ hours laboratory
Prerequisite: A minimum grade of 'C' in PHOT 105 or PHOT 130
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)
1½ hours lecture - 4½ hours laboratory
Prerequisite: A minimum grade of 'C' in PHOT 105
Transfer acceptability: CSU; UC
An exploration of the creative and technical possibilities of the View Camera 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 215   Creative Photography   (3)
1½ hours lecture - 4½ hours laboratory
Prerequisite: *A minimum grade of 'C' in 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)
1½ hours lecture - 4½ hours laboratory
Prerequisite: *A minimum grade of 'C' in PHOT 105, or concurrent enrollment in 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 Kallitype, Bromoil, and gum printing.

PHOT 220   Commercial Photography   (3)
1½ hours lecture - 4½ hours laboratory
Prerequisite: *A minimum grade of 'C' in PHOT 130*
Transfer acceptability: *CSU*
Considerations of professional technical fundamentals in lighting, camera systems, digital workflow and management as applied in studio and location photography for commercial, advertising, and promotional purposes.

PHOT 225   Photographic Portraiture   (3)
1½ hours lecture - 4½ hours laboratory
Prerequisite: *A minimum grade of 'C' in PHOT 130*
Transfer acceptability: *CSU*
Techniques and styles of photographic portraiture. Studio and non studio applications will be explored using black and white and color films or digital capture. Emphasis on lighting equipment and techniques.

Physical Education
See Kinesiology

Physical Science (PHSC)
Contact the Physics and Engineering Department for further information.
760-744-1150, ext. 2505
Office: NS-110

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: *A minimum grade of 'C' in PHSC 100, 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
Corequisite: *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
Office: NS-355B

COURSE OFFERINGS

*UC credit limitations --
- No credit for PHYS 101 or 102 if taken after 120, 200, or 230
- PHYS 120, 121 or 200, 201 or 230, 231, 232 combined: 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: *A minimum grade of 'C' in 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: *A minimum grade of 'C' in 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: *A minimum grade of 'C' in MATH 110*
Recommended preparation: *MATH 115*
Transfer acceptability: *CSU; UC**
C-ID PHYS 105; C-ID PHYS 100S for PHYS 120 and 121 combined
The fundamental principles of classical mechanics, wave motion, sound, thermodynamics, and fluids.

PHYS 121   General Physics   (4)
3 hours lecture - 3 hours laboratory
Prerequisite: *A minimum grade of 'C' in PHYS 120*
Transfer acceptability: *CSU; UC**
C-ID PHYS 110; C-ID PHYS 100S for PHYS 120 and 121 combined
A second semester continuation of PHYS 120. The fundamental principles of optics, electricity, magnetism, and modern physics.

PHYS 197   Physics Topics   (.5-5)
Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture or laboratory may be scheduled by the department. Refer to Class Schedule.
Transfer acceptability: *CSU; UC - Credit determined by UC upon review of course syllabus*
Topics in Physics. See Class Schedule for specific topic offered. Course title will designate subject covered.

PHYS 200   Fundamentals of Physics   (5)
4 hours lecture - 3 hours laboratory
Prerequisite: *A minimum grade of 'C' in MATH 140, 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: *A minimum grade of 'C' in PHYS 200; A minimum grade of 'C' in MATH 141, 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: *A minimum grade of 'C' in MATH 141, or concurrent enrollment in MATH 141*
Recommended preparation: *PHYS 130*
Transfer acceptability: *CSU; UC**
C-ID PHYS 205; PHYS 200S for PHYS 230, 231 and 232 combined
Classical mechanics, thermodynamics, and fluid dynamics. Required for students whose major field is physics, chemistry, or engineering. This is the first semester of a three semester sequence.

PHYS 231   Principles of Physics   (5)
4 hours lecture - 3 hours laboratory
Prerequisite: *A minimum grade of 'C' in PHYS 230; A minimum grade of 'C' in MATH 205, or concurrent enrollment in MATH 205*
Transfer acceptability: *CSU; UC**
C-ID PHYS 210; PHYS 200S for PHYS 230, 231 and 232 combined
Classical electromagnetism, electromagnetic waves, and optics. Required for students whose major field is physics, chemistry, or engineering. This is the second semester of a three semester sequence.

PHYS 232   Principles of Physics   (4)
3 hours lecture - 3 hours laboratory
Prerequisite: *A minimum grade of 'C' in PHYS 231 or PHYS 201, and MATH 205*
Transfer acceptability: *CSU; UC**
C-ID PHYS 215; PHYS 200S for PHYS 230, 231 and 232 combined
Modern Physics. Required for students whose major field is physics, chemistry, or engineering. This is the third semester of a three-semester sequence.

PHYS 295   Directed Study in Physics   (1, 2, 3)
3, 6, or 9 hours laboratory
Prerequisite: *Approval of project or research by department chairperson*
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.

Physiology
See Biology

Political Science (POSC)

Contact the Economics, History and Political Sciences Department for further information.
760-744-1150, ext. 2412
Office: MD-375

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*
C-ID POLS 110 for POSC 101 and 102 combined
A study of the development of American political institutions, the basic features of the Constitution, and major court interpretations that affect our lives today. Special attention will be given to understanding the historical origins of the US Political System from colonialism to reconstruction and the historical development of the civil rights revolution of various ethnic and gender groups, their historical struggles and efforts to overcome discrimination. This course will also address the electoral process and fundamental concepts of democracy, liberty, diversity, and equality. This course, together with POSC 102, satisfies the American History and Institutions requirement.

**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*
C-ID POLS 110 for POSC 101 and 102 combined
An examination of the US Constitution as it relates to the major institutions of government: the Congress, the Presidency, and the Supreme Court. It also emphasizes social, economic, and foreign policy so that students will have an understanding of the issues they face in the contemporary era. California history and government, another course component, will be compared and contrasted to the national political system.

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 121   Introduction to Law   (3)
3 hours lecture
Note: Cross listed as LS 121
Transfer acceptability: CSU; UC - BUS 115, 116, 117, LS 121 combined: maximum credit, one course.
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.

POSC 240   Civil Liberties and Procedures   (3)
3 hours lecture
Note: Cross listed as LS 240
Transfer acceptability: CSU; UC
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.

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 and/or laboratory may be scheduled by the department. Refer to Class Schedule.
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
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
Office: MD-241
Associate Degree, Certificate of Achievement and Certificate of Proficiency requirements are listed in Section 6 (green pages).
Associate Degrees for transfer IGETC and CSUGE requirements are listed in Section 7 (green pages).

COURSE OFFERINGS

PSYC 100   Introduction to Psychology   (3)
3 hours lecture
Transfer acceptability: CSU; UC
C-ID PSY 110
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
C-ID SOCI 130
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
C-ID PSY 180
Provides an overview, from a psychological perspective, of human growth and development throughout the lifespan, from conception to death. Biological and environmental influences on development, developmental theories and research of physical, cognitive, personality, and social development, as well as attention to developmental problems are examined.

PSYC 115   The Psychology of Personal Growth and Development   (3)
3 hours lecture
Transfer acceptability: CSU
C-ID PSY 115
This course is designed with an applied focus for students interested in how psychology is useful in everyday life and how scientists, clinicians, and practitioners study and apply psychology. The course surveys different theories and psychological perspectives and how these may be applied across a person's life. The influence of factors such as culture, gender, ethnicity, historical cohort, and socio-economic status are examined. Emphasis on self understanding and application through the study of the individual, environment and social relationships which contribute to unique personal development.

PSYC 120   Social Psychology   (3)
3 hours lecture
Transfer acceptability: CSU; UC
C-ID PSY 170
Considers individual human behavior in relation to the social environment. The power of the situation, other individuals, and the social group will be examined. Emphasized topics include: aggression, prejudice and stereotypes, interpersonal attraction, attitudes and attitude change, conformity, group phenomena, gender roles, cultural norms, person perception, and social cognition.

PSYC 125   Human Sexuality   (3)
3 hours lecture
Note: Cross listed as SOC 125
Transfer acceptability: CSU; UC
C-ID PSY 130
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 Gender   (3)
3 hours lecture
Transfer acceptability: CSU; UC
Psychological research and theories to examine the development and impact of gender identity. Areas covered include the psychological and cultural history of gender and gender identity, changing sex roles, socialization, issues related to mental and physical well-being, stereotyping, academics/careers, and cognition. Content will be relevant to both men and women.

PSYC 140   Introduction to Psychological and Social Services   (4)
3 hours lecture - 3 hours laboratory
Note: *Cross listed as SOC 140/AODS 140*
Transfer acceptability: *CSU*
Supervised internship in a human service agency or an alcohol and other drug treatment facility. An overview of the field of human services, including alcohol and other drug treatment. The roles of psychologists, sociologists, social workers, family therapists, social service assistants and addiction counselors are compared and contrasted, and the issues they deal with are described. Through cooperative efforts of provider agencies, the instructor, and the student, the skills utilized for entry-level employment are observed, practiced, and evaluated under supervision.

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 Alcohol and Other Drug Studies   (3)
3 hours lecture
Note: *Cross listed as SOC 150/AODS 150*
Transfer acceptability: *CSU*
Examines alcohol, tobacco and psychoactive drugs in society. Biological, psychological and socio-cultural factors of drug abuse and dependence will be explored. The impact of addiction on families and society; contemporary treatment techniques, and the addiction counseling profession will be covered.

PSYC 155   The Physiology and Pharmacology of Psychoactive Drugs   (3)
3 hours lecture
Note: *Cross listed as SOC 155/AODS 155*
Transfer acceptability: *CSU*
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 long-term affective, behavioral, cognitive, biological, and social consequences of psychoactive drug use will be explored, including disorders such as Korsakoff's syndrome and other nutritional deficiencies.

PSYC 160   Prevention, Intervention, and Education   (3)
3 hours lecture
Note: *Cross listed as SOC 160/AODS 160*
Transfer acceptability: *CSU*
This course will review historical and contemporary approaches for chemical dependency, including prevention, intervention, and education. It will analyze the progression of substance abuse and chemical dependency disorders and will evaluate types of prevention, education, and intervention strategies.

PSYC 197   Special Topics in Contemporary Psychology   (1,1.5,2,3)
1, 1½, 2, or 3 hours lecture
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   (4)
4 hours lecture
Prerequisite: *A minimum grade of 'C' in MATH 54 or 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 and MATH 120 combined: maximum credit, one course*
C-ID MATH 110
Quantitative and qualitative methods as applied to behavioral science data. Frequency distributions, measures of central tendency, variability, hypothesis testing, measures of probability and significance, correlation, regression, and inferential statistics. Also included are data entry, graphing, statistical analysis, and interpretation of data using word processing, spreadsheet, and statistical software.

PSYC 210   Physiological Psychology   (4)
3 hours lecture - 3 hours laboratory
Prerequisite: *A minimum grade of 'C' in PSYC 100*
Transfer acceptability: *CSU; UC*
C-ID PSY 150
An examination of the biological basis of behavior. Topics to be covered include neuroanatomy, neurophysiology, psychoactive drug use and addiction, endocrinology, encephalic evolution, learning and memory, sexual behavior, sleep processes and neuropsychological disorders. Laboratory includes neuroanatomical dissection.

PSYC 211   Introduction to Cognitive Psychology   (3)
3 hours lecture
Recommended Preparation: *PSYC 100*
Transfer acceptability: *CSU; UC*
A general introduction to the principles of cognition. This course examines theoretical and research approaches to the study of cognitive neuroscience, perception, attention, memory, knowledge, visual imagery, language acquisition and development, problem solving and decision making.

PSYC 225   Psychology of Abnormal Behavior   (3)
3 hours lecture
Prerequisite: *A minimum grade of 'C' in PSYC 100*
Transfer acceptability: *CSU; UC*
C-ID PSY 120
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: *A minimum grade of 'C' in PSYC 100, PSYC/SOC 205, ENG 100*
Transfer acceptability: *CSU; UC*
C-ID PSY 205B
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 Process   (3)
3 hours lecture
Note: *Cross listed as AODS 250/SOC 250*
Transfer acceptability: *CSU*
An introduction to the dynamics of group interaction, with emphasis upon the individual's firsthand experience as the group studies itself under supervision. 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   Case Management, Law and Ethics   (3)
3 hours lecture
Note: *Cross listed as AODS 255/SOC 255*
Transfer acceptability: *CSU*
This course reviews the principles and practice of case management in addiction treatment including the processes of intake, screening, assessment, treatment planning, referral, and documentation. Professional and ethical codes of conduct and behavior are also reviewed and emphasized.

PSYC 260   Chemical Dependency Family Counseling   (3)
3 hours lecture
Note: *Cross listed as AODS 260/SOC 260*
Transfer acceptability: *CSU*
This course is designed to explore methods of assisting family members and others to understand and to cope with the alcohol and drug abuse of alcoholics and addicts. Several family therapy modalities will be explored. The approach will be experiential in format and students will participate in exercises that lead to the development of these skills.

PSYC 298   Directed Field Experience I   (5)
3 hours lecture - 6 hours laboratory
Note: *Cross listed as AODS 298/SOC 298*
Transfer acceptability: *CSU*
Supervised internship in a human service agency or an alcohol and other drug treatment facility. The student intern will have an opportunity to observe human service providers working with clients in agency settings. Ethical guidelines for helping professions, developing cultural competence, stages of change and motivational interviewing as a helping style are discussed. Interns practice interviewing skills for increasing motivation for positive change.

PSYC 299   Directed Field Experience II   (6)
3 hours lecture - 9 hours laboratory
Prerequisite: *A minimum grade of 'C' in AODS 140/SOC 140/PSYC 140 or AODS 298/SOC 298/PSYC 298 and AODS/250/SOC 250/PSYC 250 and AODS 255/SOC 255/PSYC 255*
Note: *Cross listed as AODS 299/SOC 299*
Transfer acceptability: *CSU*
Supervised internship in an alcohol and other drug treatment facility. This course emphasizes advanced concepts in chemical dependency. Students refine their skills for the 12 core functions of effective clinical practice and compile a professional portfolio in preparation for the state certifying written exam. This course meets the 45-hour supervised practicum requirement for the California Certification Board of Alcohol and Drug Counselors.

Public Works Management (PWM)

Contact the Trade and Industry Department for further information.
760-744-1150, ext. 2545
Office: T-102A

Associate Degree, Certificate of Achievement and Certificate of Proficiency requirements are listed in Section 6 (green pages).

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   Street 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   Asphalt and Portland Cement   (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   (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 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 57   Plan Interpretation and Cost Estimating   (3)
3 hours lecture
Recommended preparation: *MATH 15*
Provides a basic introduction into reading and interpreting construction plans related to public works and street improvement projects. Will provide the student with the fundamental understanding of how construction plans relate to actual construction and how to use the plans to determine the quantity of materials needed to complete the work proposed on the plans and to estimate a cost for the completion of the work.

PWM 60   Supervision   **(3)**
3 hours lecture
Note: *Cross listed as WWT 60*
Supervisory aspects of public agencies including organization, decision making, coordination, communication, and public relations. Personnel supervision including coaching, training, evaluation, discipline, team building, morale, and grievances. Safety programs and encouraging safe conditions, actions and attitudes.

Reading (READ)

Contact Reading Services for further information.
760-744-1150, ext. 2568
Office: H-119C

COURSE OFFERINGS

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

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 and/or laboratory may be scheduled by the department. Refer to Class Schedule.
Non-degree Applicable
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
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 105   Academic Reading   **(3)**
3 hours lecture
This course focuses on developing specific reading strategies to support success within academic courses and career technical courses. Emphasis is placed on constructing meaning, analyzing, and synthesizing diverse text types, as well as exploring the relationship between strong reading skills and the physiological, psychological, and sociological aspects of life-long learning.

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 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 and/or laboratory may be scheduled by the department. Refer to Class Schedule.
Transfer acceptability: CSU
Topics in Reading. See Class Schedule for specific topic offered. Course title will designate subject covered.

Radio and Television
See Digital Broadcast Arts

Real Estate (RE)

Contact the Business Administration Department for further information.
760-744-1150, ext. 2488
Office: MD-341
Associate Degree, Certificate of Achievement and Certificate of Proficiency requirements are listed in Section 6 (green pages).

COURSE OFFERINGS

RE 100   Real Estate Principles   **(3)**
3 hours lecture
Note: *This course is one of three mandatory classes required to be completed before the Real Estate Salesperson Exam can be taken. A grade of 'C' must be earned in this course before a Real Estate Salesperson License will be awarded.*
Transfer acceptability: CSU
Basic laws and principles of California real estate. Gives understanding, background, and terminology necessary for advanced study in specialized courses.

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 residential sales comparison and income approaches. Covers valuation principles and procedures applicable to both approaches. Includes fifteen hours of the Uniform Standards of Professional Appraisal Practice, required of students applying for the real estate residential and certified residential exam.

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 140   Introduction to Property Management   (3)
3 hours lecture
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 150   Residential Appraisal   (3)
3 hours lecture
Recommended preparation: RE 100 and RE 111
Transfer acceptability: CSU
Provides specialized training for licensed real estate salespersons, brokers, and appraisers in the methods and techniques used to evaluate residential property.

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 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 and/or laboratory may be scheduled by the department. Refer to Class Schedule.
Transfer acceptability: CSU
Topics in Real Estate. See Class Schedule for specific topic offered. Course title will designate subject covered.

Recreation (REC)

Contact the Department of Health, Kinesiology and Recreation Management for further information.
760-744-1150, ext. 2462
Office: O-10
Associate Degree, Certificate of Achievement and Certificate of Proficiency requirements are listed in Section 6 (green pages).
For transfer information, consult a Palomar College Counselor.

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.

Registered Dental Assisting

See Dental Assisting

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
Office: MD-261

COURSE OFFERINGS

RS 101   World Religions   (3)
3 hours lecture
Transfer acceptability: CSU; UC
A comparative study of the practices, beliefs, institutions, and core characteristics of the major religions of the world: Western, Asian, and indigenous.

RS 102   Religion in American History   (3)
3 hours lecture
Transfer acceptability: CSU; UC
Examines the role of religion and religious groups in key events, time periods, regions, and institutions of the United States. The course concentrates on the interaction of religious groups with each other and with the larger society, particularly in relation to political, economic, geographical, and cultural life of the nation. Topics include colonialism, the Revolution, anti-slavery, the expansion west, the Civil War, immigration, the World Wars, the Great Depression, the Civil Rights Movement, and the 1960s.

RS 103   Religion and American Political Institutions   (3)
3 hours lecture
Transfer acceptability: CSU; UC
Study of relations between religion, religious communities, and political institutions in the United States and California. The course examines political institutions and processes under the U.S. and California Constitutions, the influence of religion and religious communities on these institutions and processes, and the influence of these institutions and processes on religious communities, especially related to the rights and obligations of citizenship. Topics of study include freedom of religion, civil rights and citizenship, the political and religious philosophies of the framers of the U.S. Constitution, Constitutional documents as sources of civil religion, religion and immigration, separation of church and state, religion in public education, war and religion.

RS 104   Introduction to Buddhism   (3)
3 hours lecture
Transfer acceptability: CSU; UC
Introduction to the core practices, beliefs, institutions, and characteristics of Buddhist communities.

**RS 105   Ritual/Symbol/Myth:
              Ways of Understanding Religion   (3)**
3 hours lecture
Transfer acceptability: CSU; UC
The course introduces students to the religious dimensions of ritual, symbol, and myth in order to explore the nature of religion in traditional settings and in the popular cultures of the present.

RS 108   History of Christianity   (3)
3 hours lecture
Transfer acceptability: CSU; UC
A survey of movements, institutions, and communities in the history of Christianity from the first century to the twentieth century. Concentrates on socio-political influences, contexts, and consequences related to Christian history.

RS 110   Religion in America   **(3)**
3 hours lecture
Transfer acceptability: CSU; UC
Introduces students to core practices, beliefs, and institutions of religions in the United States. The course also focuses on the interactions of religious communities with national culture of the United States, particularly in regards to social factors of race, ethnicity, class, age, and gender. Study concentrates on "religion" associated with Native Americans, Asian Americans, Latinos, African Americans, Jewish communities, Roman Catholics, Protestants, Muslims, Buddhists, and a variety of others.

RS 124   Islamic Cultures and Traditions   **(3)**
3 hours lecture
Note: Cross listed as MCS 124
Transfer acceptability: CSU; UC
An introductory course designed for students with a general interest in the Islamic world, including its history and cultural traditions. Examines the main social, traditional and legal institutions of Islam.

RS 197   Religious Studies Topics   **(1-3)**
Units awarded in topics courses are dependent upon the number of lecture hours required of the student. Refer to Class Schedule.
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 Business (BUS)

Sign Language
See American Sign Language

Social Work and Human Services (SWHS)
Contact the Behavioral Sciences Department for further information.
760-744-1150, ext. 2329
Office: MD-241

SWHS 100   Introduction to Social Work and Human Services   **(3)**
3 hours lecture
Transfer acceptability: CSU
An introductory overview of social welfare and the societal institutions in the U.S. that structure the provision of social services. The course presents a historical perspective on the development of U.S. social work and human services. Special attention is given to current service delivery systems, their policies and procedures, and the tasks of culturally responsive social workers and human service workers within those settings.

SWHS 120   Social Work and Human Services Fields of Service   **(3)**
3 hours lecture
Transfer acceptability: CSU
This course is an introduction to the major fields of social work and human services practice in institutions, public and private agencies and other community settings. Students examine and differentiate between the predominant settings in which social work and human services is practiced and the role of social work in contemporary society in relation to social injustice, diversity, cross-cultural issues and economic factors.

Sociology (SOC)
See also American Indian Studies, Africana Studies
Chicano Studies

Contact the Behavioral Sciences Department for further information.
760-744-1150, ext. 2329
Office: MD-241
Associate Degree, Certificate of Achievement and Certificate of Proficiency requirements are listed in Section 6 (green pages).
Associate Degrees for transfer IGETC and CSUGE requirements are listed in Section 7 (green pages).
For transfer information, consult a Palomar College Counselor.

COURSE OFFERINGS

SOC 100   Introduction to Sociology   **(3)**
3 hours lecture
Transfer acceptability: CSU; UC
C-ID SOCI 110
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
C-ID SOCI 130
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
C-ID SOCI 115
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 studies 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 125   Human Sexuality   **(3)**
3 hours lecture
Note: Cross listed as PSYC 125
Transfer acceptability: CSU; UC
C-ID PSY 130
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 130   Introduction to Sociology of Health   (3)
3 hours lecture
Transfer acceptability: CSU; UC
This course presents a broad introduction to sociological concepts and ideas related to the study of health and medicine in the United States. Emphasis will be on understanding the relationship between social factors and health, the cultural meanings associated with health and illness, the social behavior of health care personnel and people who utilize health care, the political controversies surrounding health care, and the structure of social institutions that form the health care industry. Throughout the course, there will be a focus on culture (African Americans, Latinos/Latinas), gender, age, socioeconomic status, sexual orientation and disabilities and how these factors influence the experience of health and illness.

SOC 135   Gender and Society   (3)
3 hours lecture
Transfer acceptability: CSU; UC
C-ID SOCI 140
What does it mean to be a man or a woman in today's society? This course is an introduction to the study of gender and society. Its focus will be on changes and continuities in the gender roles of men and women and on the role of gender as an organizing principle of contemporary social life. We will examine theoretical approaches to explaining gender, the impact of race, ethnicity, social class, and sexual orientation on conceptions of gender and the impact of gender on interactions in everyday life. As we explore these themes, we will study how culture, the family, the economy, the political system, mass media and the legal system have shaped and in turn are shaped by gender roles.

SOC 140   Introduction to Psychological and Social Services   (4)
3 hours lecture - 3 hours laboratory
Note: Cross listed as AODS 140/PSYC 140
Transfer acceptability: CSU
Supervised internship in a human service agency or an alcohol and other drug treatment facility. An overview of the field of human services, including alcohol and other drug treatment. The roles of psychologists, sociologists, social workers, family therapists, social service assistants and addiction counselors are compared and contrasted, and the issues they deal with are described. Through cooperative efforts of provider agencies, the instructor, and the student, the skills utilized for entry-level employment are observed, practiced, and evaluated under supervision.

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 Alcohol and Other Drug Studies   (3)
3 hours lecture
Note: Cross listed as AODS 150/PSYC 150
Transfer acceptability: CSU
Examines alcohol, tobacco and psychoactive drugs in society. Biological, psychological and socio-cultural factors of drug abuse and dependence will be explored. The impact of addiction on families and society; contemporary treatment techniques, and the addiction counseling profession will be covered.

**SOC 155   The Physiology and Pharmacology
of Psychoactive Drugs   (3)**
3 hours lecture
Note: Cross listed as AODS 155/PSYC 155
Transfer acceptability: CSU
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 long-term affective, behavioral, cognitive, biological, and social consequences of psychoactive drug use will be explored, including disorders such as Korsakoff's syndrome and other nutritional deficiencies.

SOC 160   Prevention, Intervention, and Education   (3)
3 hours lecture
Note: Cross listed as AODS 160/PSYC 160
Transfer acceptability: CSU
This course will review historical and contemporary approaches for chemical dependency, including prevention, intervention, and education. It will analyze the progression of substance abuse and chemical dependency disorders and will evaluate types of prevention, education, and intervention strategies.

SOC 165   Self and Society   (3)
3 hours lecture
Transfer acceptability: CSU; UC
Explores how behaviors, thoughts, and emotions of individuals are created and modified by the social and cultural conditions in which they live. The framework is a theoretical perspective called symbolic interaction. Its focus is on how interactional dynamics shape our behavior and our sense of who we are and what we can do. We use a multicultural approach to understanding the social construction of the self in society. We will analyze issues of identity and equality as they relate to social class, disability, sexual orientation, and among people of color (specifically African Americans and Latinos/Latinas).

SOC 170   Introduction to Justice Studies   (3)
3 hours lecture
Transfer Acceptability: CSU/UC
This course is an introduction to the interdisciplinary field of Justice Studies. An analysis of justice will be explored using sociological, philosophical, historical, and legal perspectives and methodologies. The course will emphasize social justice issues in the United States, with an emphasis on systems of inequality that affect people of color, women and other marginalized groups.

SOC 175   Introduction to LBGTQI Studies   (3)
3 hours lecture
Transfer acceptability: CSU; UC
This multicultural introductory course examines a range of gay, lesbian, bisexual, transgender, intersex and queer issues from a multicultural perspective. This interdisciplinary course introduces students to contemporary issues, theories and research findings using a sociological lens to focus on social institutions, history, politics, social movements and resistance. The course explores biological and environmental impacts on identity, equity, equality and inclusion, privilege, disadvantage, queer activism and the diverse racial, ethnic, social class and gendered experiences of sexuality. The class will focus strongly on representations in literature, art and popular culture, from a wide variety of multicultural perspectives, in particular perspectives from people of color and those from marginalized racial, ethnic and other groups that span the diverse experiences of the LBGTQI community.

SOC 197   Special Topics in Sociology   (1, 2, 3)
1, 2, or 3 hours lecture
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 AMS200/MCS 200
Transfer acceptability: CSU; UC
C-ID SOCI 150
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   (4)
4 hours lecture
Prerequisite: *A minimum grade of 'C' in MATH 54 or MATH 56 or 60 or eligibility determined through the math placement process*
Note: *Cross listed as PSYC 205*
Transfer acceptability: *CSU; UC – MATH 120 and PSYC/SOC 205 combined: maximum credit, one course*
C-ID MATH 110
Quantitative and qualitative methods as applied to behavioral science data. Frequency distributions, measures of central tendency, variability, hypothesis testing, measures of probability and significance, correlation, regression, and inferential statistics. Also included are data entry, graphing, statistical analysis, and interpretation of data using word processing, spreadsheet, and statistical software.

SOC 250   Group Leadership and Process   (3)
3 hours lecture
Note: *Cross listed as AODS 250/PSYC 250*
Transfer acceptability: *CSU*
An introduction to the dynamics of group interaction, with emphasis upon the individual's firsthand experience as the group studies itself under supervision. 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   Case Management, Law and Ethics   (3)
3 hours lecture
Note: *Cross listed as AODS 255/PSYC 255*
Transfer acceptability: *CSU*
This course reviews the principles and practice of case management in addiction treatment including the processes of intake, screening, assessment, treatment planning, referral, and documentation. Professional and ethical codes of conduct and behavior are also reviewed and emphasized.

SOC 260   Chemical Dependency Family Counseling   (3)
3 hours lecture
Note: *Cross listed as AODS 260/PSYC 260*
Transfer acceptability: *CSU*
This course is designed to explore methods of assisting family members and others to understand and to cope with the alcohol and drug abuse of alcoholics and addicts. Several family therapy modalities will be explored. The approach will be experiential in format and students will participate in exercises that lead to the development of these skills.

SOC 298   Directed Field Experience I   (5)
3 hours lecture - 6 hours laboratory
Note: *Cross listed as AODS 298/PSYC 298*
Transfer acceptability: *CSU*
Supervised internship in a human service agency or an alcohol and other drug treatment facility. The student intern will have an opportunity to observe human service providers working with clients in agency settings. Ethical guidelines for helping professions, developing cultural competence, stages of change and motivational interviewing as a helping style are discussed. Interns practice interviewing skills for increasing motivation for positive change.

SOC 299   Directed Field Experience II   (6)
3 hours lecture - 9 hours laboratory
Prerequisite: *A minimum grade of 'C' in AODS 140/SOC 140/PSYC 140 or AODS 298/SOC 298/PSYC 298 and AODS/250/SOC 250/PSYC 250 and AODS 255/SOC 255/PSYC 255*
Note: *Cross listed as AODS 299/PSYC 299*
Transfer acceptability: *CSU*
Supervised internship in an alcohol and other drug treatment facility. This course emphasizes advanced concepts in chemical dependency. Students refine their skills for the 12 core functions of effective clinical practice and compile a professional portfolio in preparation for the state certifying written exam. This course meets the 45-hour supervised practicum requirement for the California Certification Board of Alcohol and Drug Counselors.

Spanish (SPAN)

Contact the World Languages Department for further information.
760-744-1150, ext. 2390
Office: H-201
Associate Degree, Certificate of Achievement and Certificate of Proficiency requirements are listed in Section 6 (green pages).
Associate Degrees for transfer IGETC and CSUGE requirements are listed in Section 7 (green pages).

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.

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 101   Spanish I   (5)
5 hours lecture - 1 hour laboratory
Note: *Not open to students with credit for SPAN 101B.*
Transfer acceptability: *CSU; UC*
First semester of Spanish. A study of the Spanish language and Spanish-speaking cultures, with emphasis on the development of communicative skills and basic structures. Focus is on teaching elementary-level language acquisition in a cultural context through listening, speaking, reading and writing. Interacts with authentic language in context. Combines in-class instruction and practice with self-paced study in the World Languages laboratory. No previous experience in Spanish is required.

SPAN 101A   Spanish IA   (3)
3 hours lecture
Note: *Covers the first half of SPAN 101; not open to students with credit for SPAN 101*
Transfer acceptability: *CSU; UC*
Equivalent to the first half of Spanish 101. A study of the Spanish language and Spanish-speaking cultures, with emphasis on the development of communicative skills and basic structures. Focus is on teaching elementary-level language acquisition in a cultural context through listening, speaking, reading and writing. Interacts with authentic language in context. No previous experience in Spanish is required.

SPAN 101B   Spanish IB   (3)
3 hours lecture
Prerequisite: *A minimum grade of 'C' in SPAN 101A or one year of high school Spanish*
Note: *Covers the second half of SPAN 101; not open to students with credit for SPAN 101.*
Transfer acceptability: *CSU; UC*
Spanish 101B is equivalent to the second half of Spanish 101. A study of the Spanish language and Spanish-speaking cultures, with emphasis on the development of communicative skills and basic structures. Focus is on teaching elementary-level language acquisition in a cultural context through listening, speaking, reading and writing. Interacts with authentic language in context.

SPAN 102   Spanish II   (5)
5 hours lecture - 1 hour laboratory
Prerequisite: *A minimum grade of 'C' in SPAN 101 or 101B or two years of high school Spanish*
Note: *Not open to students with credit for SPAN 102B.*
Transfer acceptability: *CSU; UC*
Second semester of Spanish. A study of Spanish language and Spanish-speaking cultures, with continued emphasis on the development of communicative skills and basic structures. Continues focus on teaching elementary-level language acquisition in a cultural context through listening, speaking, reading and writing. Interacts with authentic language in context. Combines in-class instruction with self-paced study in the World Languages laboratory.

SPAN 201   Spanish III   (5)
5 hours lecture - 1 hour laboratory
Prerequisite: *A minimum grade of 'C' in SPAN 102 or 102B or three years of high school Spanish*
Note: *Not open to students with credit for SPAN 201B.*
Transfer acceptability: *CSU; UC*
Third semester of Spanish. A study of the Spanish language and Spanish-speaking cultures with an emphasis on structures and readings of culturally relevant authentic materials. Focus in on teaching culture and facilitates intermediate-level language acquisition through listening, speaking, reading and writing. Students will continue to interact with authentic language in context. Combines in-class instruction with self-paced study in the World Languages laboratory. Class is largely conducted in Spanish.

SPAN 202   Spanish IV   (5)
5 hours lecture
Prerequisite: *A minimum grade of 'C' in SPAN 201 or four years of high school Spanish*
Transfer acceptability: *CSU; UC – SPAN 202 and 212 combined: maximum credit, one course*
Fourth semester of Spanish. A continued study of the Spanish language and Spanish-speaking cultures, focusing on the refined use of intermediate-level structures and readings of culturally relevant authentic materials. Emphasis is on the expansion of cross-cultural awareness, as well as, the development of language skills in order to acquire communicative competence in Spanish. Teaches culture and facilitates language acquisition through listening, speaking, reading and writing. Interacts with more sophisticated authentic language in context. Conducted in Spanish.

SPAN 211   Spanish for Heritage Speakers I   (5)
5 hours lecture - 1 hour laboratory
Prerequisite: *A minimum grade of 'C' in SPAN 102 or SPAN 102B or three years of high school Spanish*
Transfer acceptability: *CSU; UC*
C-ID SPAN 220
Designed for heritage speakers of Spanish or other linguistically qualified students. Provides instruction that builds upon the existing reading, writing, speaking and listening skills. Also focuses on the cultural heritage and knowledge of Spanish-speaking students. Increases awareness of linguistic registers, expands vocabulary, and develops an appreciation for Hispanic and Latino cultures as manifested in Spanish speaking countries and in the United States. This course is entirely conducted in Spanish.

SPAN 212   Spanish for Heritage Speakers II   (5)
5 hours lecture
Prerequisite: *SPAN 211 or four years of high school Spanish*
Transfer acceptability: *CSU; UC*
Course is designed for heritage speakers of Spanish or other linguistically qualified students. Continues to provide instruction that builds upon the existing reading, writing, speaking and listening skills and the cultural heritage and knowledge of Spanish-speaking students. Continues to increase awareness of linguistic registers and expand vocabulary toward the advanced level. Practice in expository and creative writing based on culturally relevant readings and critical thinking. Develops an appreciation for Hispanic and Latino cultures as manifested in Spanish speaking countries and in the United States. This course is entirely conducted in Spanish.

SPAN 235   Intermediate Conversation and Writing   (3)
3 hours lecture
Prerequisite: *A minimum grade of 'C' in SPAN 201, or SPAN 211 or four years of high school Spanish*
Transfer acceptability: *CSU; UC*
An intermediate-level study of the Spanish language and Spanish-speaking cultures. Focus is on developing oral and written proficiency within a cultural context.

SPAN 295   Directed Study in Spanish   (1, 2, 3 units)
3, 6, or 9 hours lecture
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.

Speech (SPCH)

Contact the Speech Communication/Forensics/ASL Department for further information.
760-744-1150, ext. 2405
Office: H-201J
Associate Degree, Certificate of Achievement and Certificate of Proficiency requirements are listed in Section 6 (green pages).

COURSE OFFERINGS

SPCH 100   Oral Communication   (3)
3 hours lecture
Transfer acceptability: *CSU; UC*
C-ID COMM 110
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*
C-ID COMM 120
Argumentation 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*
C-ID COMM 130
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
C-ID COMM 180
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
C-ID COMM 170
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
C-ID COMM 150
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)
3 hours laboratory
Transfer acceptability: CSU
Planning, preparation, management, and supervision of speech tournaments and other interscholastic speech activities.

SPCH 150   Debate Research   (1)
3 hours laboratory
Transfer acceptability: CSU
Advanced debate training including investigation and research of the national intercollegiate debate resolution.

SPCH 160   Practical Public Speaking   (1)
3 hours laboratory
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 197A   Topics in Speech Communication   (1-3)
Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture or laboratory may be scheduled by the department. Refer to Class Schedule.
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   (3)
9 hours laboratory
Note: May be taken 4 times
Transfer acceptability: CSU; UC – Credit determined by UC upon review of course syllabus.
C-ID COMM 160B
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.

Theatre Arts (TA)

Contact the Performing Arts Department for further information.
760-744-1150, ext. 2316
Office: PAC-112
Associate Degree, Certificate of Achievement and Certificate of Proficiency requirements are listed in Section 6 (green pages).
Associate Degrees for transfer IGETC and CSUGE requirements are listed in Section 7 (green pages).

COURSE OFFERINGS

Individual courses are not repeatable. State Regulations (Title 5, Sections 55040-55041) also limit the number of times a student may take courses with related content and similar primary educational activities. Therefore, some combinations of course work in Theatre Arts have limitations on the number of times a student may enroll. Specific information about enrollment limitations for Theatre Arts classes is available at http://www.palomar.edu/schedule/restrictions.htm

TA 100   Introduction to the Theatre   (3)
3 hours lecture
Transfer acceptability: CSU; UC
C-ID THTR 111
Theatre texts, processes and performances create a mirror that reflects an image of the world. This course actively engages students through the language, tools and processes of theatre to examine and encounter our world and to articulate insights about human behavior, experience, culture & society.

TA 106A   Basic Costume I: Technology   (3)
2 hours lecture - 3 hours laboratory
Note: Cross listed as FASH 106A and ENTT 106A
Transfer acceptability: CSU; UC
C-ID THTR 174
A foundational course providing a basic introduction to practices, theories, techniques and procedures of costume technology for theatre, film and television. Focus will be on the structure of a working costume shop, basic hand and machine sewing techniques, textile identification, basic garment fitting, simple pattern modification, and production wardrobe crew procedures. Practical training in college productions is incorporated during the course of study.

TA 107   Lighting for Stage and Television   (3)
2 hours lecture - 3 hours laboratory
Note: Cross listed as ENTT 107
Transfer acceptability: CSU; UC
C-ID THTR 173
Techniques, theories, and procedures necessary to develop lighting and lighting effects integrated into film, television, and theatre productions. Practical experience in college productions.

**TA 108   Stagecraft and Scene Design
for Theatre and Television   (3)**
2 hours lecture - 3 hours laboratory
Note: Cross listed as ENTT 108
Transfer acceptability: CSU; UC
C-ID THTR 172
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
Note: *Cross listed as FASH 109*
Transfer acceptability: *CSU; UC*
C-ID THTR 175
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 laboratory
Prerequisite: *Completion of, or concurrent enrollment in TA/FASH 106 or TA/ENTT 107 or TA/ENTT 108, or TA/FASH 109*
Transfer acceptability: *CSU; UC*
Techniques and procedures of planning and coordination through all phases of the technical theatre production process. Practical training through college production.

TA 113A　　　Improvisational Theatre I　　　　(3)
3 hours lecture
Transfer acceptability: *CSU*
Improvisational theatre techniques for various forms that engage the audience in an interactive performance setting. The course includes basic skills for creating and sustaining improvised situations as well as improvisational structures that challenge the participant's skills. Also included are improvisational structures that will reflect and analyze societal situations of conflict found in the participants' lives and communities.

TA 113B　　　Improvisational Theatre II　　　　(3)
3 hours lecture
Prerequisite: *A minimum grade of 'C' in TA 113A*
Transfer acceptability: *CSU*
Advanced skills for creating, performing and facilitating improvisational and interactive theatre events.

TA 115　　　Acting I　　　　　　　　　(3)
3 hours lecture
Transfer acceptability: *CSU; UC*
C-ID THTR 151
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　　　Acting II　　　　　　　　(3)
3 hours lecture
Prerequisite: *A minimum grade of 'C' in TA 115*
Transfer acceptability: *CSU; UC*
C-ID THTR 152
This course follows Acting I and continues the exploration of theories and techniques used in preparation for the interpretation of drama through acting. The emphasis will be placed on deepening the understanding of the acting process. 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 119　　　Voice and Speech　　　　　(3)
3 hours lecture
Transfer acceptability: *CSU; UC*
A practical and experiential class introducing students to exercises and theories of voice and speech production leading to improved power, expressiveness and clarity. Methodology will include major contemporary approaches to developing the actor's voice.

TA 125　　　Beginning Oral Interpretation　　　(3)
3 hours lecture
Note: *Cross listed as SPCH 125*
Transfer acceptability: *CSU; UC*
C-ID COMM 170
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 131　　　Elementary Stage Costume and Make Up　　(3)
2 hours lecture - 3 hours laboratory
Note: *Cross listed as FASH 131*
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.

TA 150　　　Dramatic Literature and Script Analysis　　(3)
3 hours lecture
Transfer acceptability: *CSU; UC*
C-ID THTR 114
This course is designed to allow the student to explore, understand, and appreciate a diverse range of play scripts. Using investigative techniques [e.g. scrutinizing the playwright's methods of creating theatre through plot, character and imagery, and understanding how scripts convey meaning to the professional theatre artist and theatre-goer as distinct from other forms of literature], the student will gain new insights into how to read, use, and create a play script.

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 173　　　Musical Theatre Scenes I　　　　(1)
3 hours laboratory
Note: *Cross listed as DNCE 173/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 174　　　Musical Theatre Scenes II　　　　(3)
3 hours lecture
Prerequisite: *A minimum grade of 'C' in DNCE/MUS/TA 173*
Note: *Cross listed as DNCE/MUS 174*
Transfer acceptability: *CSU*
A continuation of Musical Theatre Scenes I. A deeper exploration into the acting, singing, and dancing necessary for Broadway Musicals from the 1930's to present.

TA 182　　　Introduction to Arts Management　　　(3)
9 hours laboratory
Note: *Cross listed as AMS 182/ART 182/DNCE 182/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: *A minimum grade of 'C' in AMS/ART/DANCE/MUS or TA 182*
Note: *Cross listed as AMS 183/ART 183/DNCE 183/MUS 183*
Transfer acceptability: *CSU*
Practical experience in arts management in the visual and performing arts.

TA 184   Creative Theatre Ensemble   (1, 1.5, 2)
3, 4½ or 6 hours laboratory
Transfer acceptability: CSU; UC
Students in theatre and allied disciplines work collaboratively on creating an original devised theatre performance or on an existing text that requires an ensemble approach to the performance.

TA 191A   Rehearsal and Performance I   (1, 2)
3 or 6 hours laboratory
Transfer acceptability: CSU; UC
C-ID THTR 191
An initial experience of the rehearsal and performance of a departmental theatre production. Generally this would involve an ensemble, non-speaking or small supporting role.

TA 191B   Rehearsal and Performance II   (1, 2)
3 or 6 hours laboratory
Prerequisite: A minimum grade of 'C' in TA 191A
Transfer acceptability: CSU; UC
C-ID THTR 191
Second experience of the rehearsal and performance of a departmental theatre production. Generally this would involve a small to medium supporting role in the production.

TA 191C   Rehearsal and Performance III   (1, 2)
3 or 6 hours laboratory
Prerequisite: A minimum grade of 'C' in TA 191B
Transfer acceptability: CSU; UC
C-ID THTR 191
Third experience of the rehearsal and performance of a departmental theatre production. Generally this would involve a medium supporting role or leading role in the production.

TA 191D   Rehearsal and Performance IV   (1, 2)
3 or 6 hours laboratory
Prerequisite: A minimum grade of 'C' in TA 191C
Transfer acceptability: CSU; UC
C-ID THTR 191
Fourth experience of the rehearsal and performance of a departmental theatre production. Generally this would involve a large supporting role or lead role in the production.

TA 192A   Technical Theatre Practicum I   (1-2)
3-6 hours laboratory
Note: At least one unit of this course is required of all theatre arts majors
Transfer acceptability: CSU; UC
C-ID THTR 192
Students will gain practical experience in the application of production responsibilities in house staff. Students will also observe and evaluate the production responsibilities of the stage crew.

TA 192B   Technical Theatre Practicum II   (1, 2)
3 or 6 hours laboratory
Prerequisite: A minimum grade of 'C' in TA 192A
Transfer acceptability: CSU; UC
C-ID THTR 192
Students will gain practical experience in the application of production responsibilities in the stage crew. Students will also observe and evaluate the production responsibilities of the technical staff.

TA 192C   Technical Theatre Practicum III   (1, 2)
3 or 6 hours laboratory
Prerequisite: A minimum grade of 'C' in TA 192B
Transfer acceptability: CSU; UC
C-ID THTR 192
Students will gain practical experience in the application of production responsibilities in the technical staff. Students will also observe and evaluate the production responsibilities of the leadership roles in the technical staff.

TA 192D   Technical Theatre Practicum IV   (1, 2)
3 or 6 hours laboratory
Prerequisite: A minimum grade of 'C' in TA 192C
Transfer acceptability: CSU; UC
C-ID THTR 192
Students will gain practical experience in the application of production responsibilities in a leadership role in the technical staff. Students will also observe and evaluate the production responsibilities of the design staff.

TA 197E   Management of Theatre Activities   (.5-3)
1½ to 9 hours laboratory
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 and/or laboratory may be scheduled by the department. Refer to Class Schedule.
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   Acting III   (3)
3 hours lecture
Prerequisite: A minimum grade of 'C' in TA116
Transfer acceptability: CSU; UC
Emphasizes analysis of literary text and physical methods in the process of creating characters. Scene study and role preparation of significant texts by modern playwrights.

TA 216   Acting IV   (3)
3 hours lecture
Prerequisite: A minimum grade of 'C' in TA116
Transfer acceptability: CSU; UC
Advanced topics in acting technique including approaches to style and contemporary innovations in acting methods.

TA 283   Musical Theatre Scenes III   (1)
3 hours laboratory
Prerequisite: DNCE 174
Note: Cross listed as MUS/DNCE 283
Transfer acceptability: CSU
A continuation of Musical Theatre scenes II with emphasis on more advanced acting, singing and dance techniques.

TA 284   Musical Theatre Scenes IV   (1)
3 hours laboratory
Prerequisite: DNCE 283
Note: Cross listed as DNCE/TA 284
Transfer acceptability: CSU
Exploring the rehearsing and performing of Musical Theatre acting, singing, and dancing at the advanced level.

Wastewater Technology Education (WWT)

Contact Trade and Industry for further information. 760-744-1150, ext. 2545
Office: T-102
Associate Degree, Certificate of Achievement and Certificate of Proficiency requirements are listed in Section 6 (green pages).

COURSE OFFERINGS

Courses numbered under 100 are not intended for transfer credit.

WWT 50   Calculations in Water/Wastewater Technology   (3)
3 hours lecture
Note: *Cross listed as WTE 50*
Provides instruction in entry-level to intermediate-level mathematical calculations used in the operation and evaluation of conventional water/wastewater treatment processes and water distribution systems. The course content has been developed to meet requirements for entry to water/wastewater education program courses. Course will cover basic geometry, metric conversions, flows, pressure, and chemical dosage as it relates to the water/wastewater industry. Material will parallel some of the problems found on State Certification examinations.

WWT 52   Basic Plant Operations: Wastewater Treatment   (3)
3 hours lecture
Prerequisite: *A minimum grade of 'C' in WTE/WWT 50*
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 54   Wastewater Collection Systems   (3)
3 hours lecture
Prerequisite: *A minimum grade of 'C' in WTE/WWT 50*
Wastewater collection systems and collection system equipment, pipeline cleaning and maintenance, system design, safety procedures, inspecting and testing procedures used in collections systems.

WWT 56   Intro to Electrical and Instrumentation Processes   (3)
3 hours lecture
Prerequisite: *A minimum grade of 'C' in WTE/WWT 50*
Note: *Cross listed as WTE 56*
Introduction to basic electrical theory, applications, common uses, and real world examples of control systems and instrumentation used in water distribution, water and wastewater treatment plants; including switches, relays, alarms, motors, instrumentation, valve actuators, computers, and communication.

WWT 58   Backflow Tester Training   (3)
2½ hours lecture - 1½ hours laboratory
Note: *Cross listed as WTE 58*
Provides intensive training focused on the field testing procedures and diagnostics for backflow prevention devices and training in the recognition and abatement of cross connections in water and plumbing systems. Students will acquire the knowledge, skills, and abilities required to test as a certified backflow tester.

WWT 60   Public Works Management   (3)
3 hours lecture
Note: *Cross listed as PWM/WTE 60*
Administration, management, and supervisory aspects of public agencies including organization, decision making, coordination, communication, and public relations. Personnel supervision including coaching, training, evaluation, discipline, team building, morale, and grievances. Safety programs and encouraging safe conditions, actions and attitudes.

WWT 62   Cross Connection Specialist   (3)
3 hours lecture
Note: *Cross listed as WTE 62*
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 the American Water Works Association.

WWT 64   Advanced Plant Operations: Wastewater Treatment   (3)
3 hours lecture
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 66   Motors, Pumps, and Hydraulics   (3)
3 hours lecture
Prerequisite: *A minimum grade of 'C' in WTE/WWT 50*
Note: *Cross listed as WTE 66*
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 97   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 and/or laboratory may be scheduled by the department. Refer to Class Schedule.
Topics in Wastewater Technology Education. See Class Schedule for specific topic offered. Course title will designate subject covered.

Water Technology Education (WTE)

Contact Trade and Industry for further information. 760-744-1150, ext. 2545
Office: T-102
Associate Degree, Certificate of Achievement and Certificate of Proficiency requirements are listed in Section 6 (green pages).

COURSE OFFERINGS

Courses numbered under 100 are not intended for transfer credit.

WTE 50   Calculations in Water/Wastewater Technology   (3)
3 hours lecture
Note: *Cross listed as WWT 50*
Provides instruction in entry-level to intermediate-level mathematical calculations used in the operation and evaluation of conventional water/wastewater treatment processes and water distribution systems. The course content has been developed to meet requirements for entry to water/wastewater education program courses. Course will cover basic geometry, metric conversions, flows, pressure, and chemical dosage as it relates to the water/wastewater industry. Material will parallel some of the problems found on State Certification examinations.

WTE 52   Water Distribution Systems   (3)
3 hours lecture
Prerequisite: *A minimum grade of 'C' in WTE/WWT 50*
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 State of California - Water Distribution Operator Grade I, Grade II. and Grade III exams.

WTE 54   Basic Plant Operations: Water Treatment   (3)
3 hours lecture
Prerequisite: *A minimum grade of 'C' in WTE/WWT 50*
Provides an introduction to water treatment plant operations in accordance with the Safe Drinking Water Act (SDWA). Special emphasis is given to implementation of the Surface Water Treatment Rule through USEPA approved filtration technology. Subject matter includes major provisions of the SDWA and its amendments; basic water chemistry; source water assessment; conventional treatment processes; treated water stability; waterborne diseases; public health protection; disinfection; and an introduction to math skills equivalent to those required of State of California Grade II water treatment plant operators. This class is helpful to those preparing for the Grade I and Grade II state examination.

WTE 56   Intro to Electrical and Instrumentation Processes   (3)
3 hours lecture
Prerequisite: *A minimum grade of 'C' in WTE/WWT 50*
Note: *Cross listed as WWT 56*
Introduction to basic electrical theory, applications, common uses, and real world examples of control systems and instrumentation used in water distribution, water and wastewater treatment plants; including switches, relays, alarms, motors, instrumentation, valve actuators, computers, and communication.

WTE 58   Backflow Tester Training   (3)
2½ hours lecture - 1½ hours laboratory
Note: *Cross listed as WWT 58*
Provides intensive training focused on the field testing procedures and diagnostics for backflow prevention devices and training in the recognition and abatement of cross connections in water and plumbing systems. Students will acquire the knowledge, skills, and abilities required to test as a certified backflow tester.

WTE 60   Public Works Management   (3)
3 hours lecture
Note: *Cross listed as PWM/WWT 60*
Administration, management, and supervisory aspects of public agencies including organization, decision making, coordination, communication, and public relations. Personnel supervision including coaching, training, evaluation, discipline, team building, morale, and grievances. Safety programs and encouraging safe conditions, actions and attitudes.

WTE 62   Cross Connection Specialist   (3)
3 hours lecture
Note: *Cross listed as WWT 62*
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 the American Water Works Association.

WTE 64   Laboratory Analysis for Water/Wastewater   (3)
2½ hours lecture - 1½ hours laboratory
Recommended preparation: *WTE /WWT 50*
Prepares students to properly monitor public drinking water quality through study of: Federal and State regulations, laboratory analyses, types of contaminants, sample collection techniques and interpretation of monitoring data.

WTE 66   Motors, Pumps, and Hydraulics   (3)
3 hours lecture
Prerequisite: *A minimum grade of 'C' in WTE/WWT 50*
Note: *Cross listed as WWT 66*
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.

WTE 72   Water Distribution II   (3)
3 hours lecture
Prerequisite: *A minimum grade of 'C' in WTE 52*
Intermediate and advanced instruction in the field of water distribution, 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 State Water Resources Control Board Water Distribution Operator certification exams at levels D-3 and D-4 and the "American Water Works Association" certification exams for Grades II, III, and IV.

WTE 74   Advanced Plant Operations:
**   Water Treatment and Reclamation   (3)**
3 hours lecture
Prerequisite: *A minimum grade of 'C' in WTE 54*
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, Disinfection/Disinfection by Product Rule and Title 22 requirements for recycled water. This course will be helpful to those preparing for Grade III and IV drinking water examinations.

WTE 97   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 and/or laboratory may be scheduled by the department. Refer to Class Schedule.
Topics in Water Technology Education. See Class Schedule for specific topic offered. Course title will designate subject covered.

Web
See CSIT - Web Technology

Welding (WELD)
Contact the Trade and Industry Department for further information.
760-744-1150, ext. 2545
Office: T-102A
Associate Degree, Certificate of Achievement and Certificate of Proficiency requirements are listed in Section 6 (green pages).

COURSE OFFERINGS

WELD 100   Welding I   (3)
1½ hours lecture - 4½ hours laboratory
Transfer acceptability: CSU
Introduction to safe practices, setup, and operation of Shielded Metal Arc Welding, Gas Tungsten Arc Welding, Flux Core Arc Welding, and Gas Metal Arc Welding.

WELD 108   Technical Mathematics   (3)
3 hours lecture
Note: *Cross listed as IT 108*
Transfer acceptability: *CSU*
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.

WELD 110   Shielded Metal Arc Welding   (3)
1½ hours lecture - 4½ hours laboratory
Transfer acceptability: *CSU*
Welding steel plate in all positions using the Shielded Metal Arc Welding process.

WELD 115   Gas Tungsten Arc Welding   (3)
1½ hours lecture - 4½ hours laboratory
Transfer acceptability: *CSU*
Safe setup, operation, and maintenance of Gas Tungsten Arc Welding equipment. Welding stainless steel, carbon steel, and aluminum in the flat and horizontal positions.

**WELD 117   Blueprint Reading and Geometric Dimensioning
                    and Tolerance   (3)**
1½ hour lecture - 4½ hours laboratory
Note: *Cross listed as DT/ENGR 117*
Transfer acceptability: *CSU*
The Blueprint Reading and Geometric Dimensioning and Tolerancing class will provide students with the ability to read and interpret blueprints. Students will learn Geometric Dimensioning and Tolerancing (GD&T) to identify, use appropriate geometric symbols and techniques of geometric dimension, used for industrial quality drawings. Students will also learn to verify geometric dimensions and tolerances of manufactured items.

WELD 120   Gas Metal Arc and Flux Cored Arc Welding   (3)
1½ hours lecture - 4½ hours laboratory
Transfer acceptability: *CSU*
Gas Metal Arc Welding steel and aluminum sheet metal, and plate 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
Transfer acceptability: *CSU*
Line interpretation, sketching, bill of materials, structural shapes, welding symbols, joint types, weld types, and metric conversions.

WELD 140   Qualification of Welders   (3)
1½ hours lecture - 4½ hours laboratory
Transfer acceptability: *CSU*
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 145   Pipe Welding   (3)
1½ hours lecture - 4½ hours laboratory
Transfer acceptability: *CSU*
Provides a thorough technical understanding of pipe welding nomenclature, weld quality, and pipe fit-up and welding procedures. Provides training to develop welding skills necessary to make high quality welds on steel pipe in the 5G, 2G and 6G positions.

WELD 150   Welding Inspection   (3)
3 hours lecture
Transfer acceptability: *CSU*
Designed to improve understanding of the role, duties, and technical requirements of welding inspectors. The course will cover topics in fundamentals of welding, welding symbols, documents used in welding, codes, specification, standards, weld joint geometry, destructive testing methods, nondestructive testing methods, discontinuities, and visual inspection of welds. Provides knowledge useful for passing the American Welding Society's Certified Welding Inspector's exam.

WELD 160   Metal Layout for Fabrication   (3)
2 hours lecture - 3 hours laboratory
Transfer acceptability: *CSU*
Provides students with knowledge of basic layout, fitup, fabrication, and 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 190   CNC Machining MasterCam I   (3)
1½ hours lecture - 4½ hours laboratory
Note: Cross listed as DT 190/ENGR 190/MACH 190
This course will introduce the student to CNC Machining on mills and lathes. Learn how to set-up and operate machines using G-Code and MasterCAM to manufacture parts and projects. Students will receive instructions and drawings of parts requiring 2- or 3-axis machining. Students will set-up, operate, and run parts on a variety of CNC Equipment.

WELD 197   Welding Technology Topics   (.5 - 3)
Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture and/or laboratory may be scheduled by the department. Refer to Class Schedule.
Transfer acceptability: *CSU*
Topics in Welding Technology. See Class Schedule for specific topic offered. Course title will designate subject covered.

Section 9
Noncredit Courses and Certificates

Noncredit Courses and Certificates

Noncredit 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 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 qualified instructors. The program is offered by the Division of Career, Technical, and Extended Education Division.

The State has defined the following specific five categories for funding: Elementary and Secondary Basic Skills, English as a Second Language, Immigrant Education, Education Programs for Persons with Substantial Disabilities, and Health and Safety Education.

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. Students who take noncredit classes on the San Marcos campus or at the Escondido Education Center will be required to pay health fees and parking fees.

Noncredit certificates of completion are offered in Adult Basic Education and in English as a Second Language.

Adult Basic Education

Contact the English as a Second Language Department for further information and registration procedures at 760-744-1150, ext. 2272/8114.

Adult Basic Education Noncredit
Certificate of Completion

This two-course sequence is designed to equip students with the basic reading and writing skills, basic computational skills and critical thinking skills needed for employment or to prepare for GED preparation courses, job training and college level courses for a career or for associate or transfer degree programs. In order to earn a certificate, students must successfully complete N ABED 202.

Certificate Requirements
N ABED 901   Literacy/Adult Basic Education I
N ABED 902   Literacy/Adult Basic Education II

Adult Basic Education (N ABED)

Contact the English as a Second Language Department for further information and registration procedures at 760-744-1150, ext. 2272/8114.

COURSE OFFERINGS

N ABED 901 Literacy/Adult Basic Education I
96 to 192 hours lecture
This course is designed to help learners to improve reading and writing skills, computational skills, critical thinking skills; to develop basic computer skills; to develop skills for the workplace; and to prepare for future educational opportunities. Learners participate in an individually prescribed program which includes classrooms activities, independent activities, collaborative learning, and mediated learning.

N ABED 902 Literacy/Adult Basic Education II
96 to 192 hours lecture
This course is designed to help learners to improve reading and writing skills, computational skills, critical thinking skills; to develop basic computer skills; to develop skills for the workplace; and to prepare for future educational opportunities. Learners participate in an individually prescribed program which includes classrooms activities, independent activities, collaborative learning, and mediated learning.

English as a Second Language (N ESL)

Contact the English as a Second Language Department for further information and registration procedures at 760-744-1150, ext. 2272/8114.

Computer Skills for ESL
Certificate of Completion

This three-course sequence is designed to equip non-native speakers of English with basic computer literacy and skills needed to be successful in today's digital world. This program will prepare students to be confident performing basic computer tasks in the workplace or in college-level courses for career, associate, or transfer degree programs. There are no prerequisites or placement tests required for these courses. In order to earn a certificate, students must successfully complete all three courses (NESL 982, 982, & 984).

Program Requirements
N ESL 982 Computer Skills 1 – Foundational Skills
N ESL 983 Computer Skills 2 – Office Applications
N ESL 984 Computer Skills 3 – The Digital Age

Conversation Skills for ESL
Certificate of Completion

This two-course sequence is designed to equip non-native speakers of English with beginning English language conversation skills. This program will prepare students for success in the workplace and/or credit courses. In order to earn a certificate, students must successfully complete N ESL 923.

Program Requirements
N ESL 922 Beginning Conversation 1
N ESL 923 Beginning Conversation 2

English as a Second Language Noncredit
Certificate of Completion

This sequence of four courses is designed to equip non-native speakers of English with the listening, speaking, reading and writing skills at the low intermediate level in English needed for employment or to successfully complete college level courses for a career or for associate or transfer degree programs. An assessment process determines appropriate initial placement in the sequence. In order to earn a certificate, students must successfully complete N ESL 304. The sequence is articulated with credit vocational English as a Second Language courses that prepare students to enter six recognized career fields and with degree applicable credit reading and composition courses.

Certificate Requirements
N ESL 901   Beginning ESL I
N ESL 902   Beginning ESL II
N ESL 903   Beginning ESL III
N ESL 904   Intermediate ESL I

Grammar Skills for ESL
Certificate of Completion
(Noncredit-Hours only; no units)

This three-course sequence is designed to equip non-native speakers of English with the grammatical skills and knowledge needed for academic writing and for success in career, associate, or transfer-degree programs. In order to earn a certificate, students must successfully complete N ESL 914.

Program Requirements
N ESL 912   ESL Grammar Skills I
N ESL 913   ESL Grammar Skills II
N ESL 914   ESL Grammar Skills III

Speaking Skills for ESL
Certificate of Completion

This three-course sequence is designed to equip non-native speakers of English with the academic speaking and pronunciation skills needed to be successful in career, associate, or transfer-degree programs. In order to earn a certificate, students must successfully complete N ESL 920.

Program Requirements
N ESL 909 English Pronunciation I
N ESL 910 English Pronunciation II
N ESL 920 Academic Speaking and Listening

Art (N ART)

Contact the Art Department for further information.
760-744-1150, ext. 2302
Office: D-14

COURSE OFFERINGS

N ART 906   Life Painting for Older Adults
24 hours lecture - 72 hours laboratory
This course examines the use of oil, acrylic or watercolor in modeling the human form. Particular attention will be placed on color mixing, drawing and paint application. This non-credit course is designed to provide older adults with ongoing opportunities to maintain their mental and artistic dexterity.

N ART 920   Foundations of Life Drawing for Older Adults
24 hours lecture - 72 hours laboratory
Introduction to drawing the human figure from observation using a wide variety of drawing media and techniques. Topics include an introduction to human anatomy and the historical and contemporary roles of figure drawing in the visual arts. Students in this course will learn both descriptive and interpretive approaches to drawing the figure. This non-credit course is designed to provide older adults with ongoing opportunities to maintain their mental and artistic dexterity.

N ART 921   Intermediate Life Drawing for Older Adults
48 hours lecture - 48 hours laboratory
An advanced investigation of the human figure as the primary subject of composition in historical and contemporary art. Developed for the advanced painting or illustration majors to aid in the preparation of entry portfolios required for admittance to specialized private four year institutions. This non-credit course is designed to provide older adults with ongoing opportunities to maintain their mental and artistic dexterity.

N ART 925   Introduction to Portraiture for Older Adults
24 hours lecture - 72 hours laboratory
Introduction to portraiture. Special emphasis is placed on the historical and contemporary role of portraiture in art. Techniques range from traditional approaches to expressive application of drawing and painting media. This non-credit course is designed to provide older adults with ongoing opportunities to maintain their mental and artistic dexterity.

N ART 951   Advanced Ceramic Techniques for Older Adults
3 hours lecture - 3 hours laboratory
This course will cover advanced techniques of hand building and wheel working with clay as well as a broad range of glazing and firing processes, helping to maintain physical dexterity and mental acuity for older adults.

N ART 956 Advanced Foundry Techniques in Sculpture for Older Adults
18 – 24 hours lecture - 36 – 72 hours laboratory
Course will provide older adult students with the opportunity to refine practices in mold making and metal casting, including project proposals and economics, experimental and production based casting techniques, patina and finishing skills.

N ART 971   Advanced Jewelry and Metal Smithing for Older Adults
36 to 72 hours lecture – 18 to 24 hours laboratory
Course will provide older adult students with the opportunity to develop and refine advanced techniques in jewelry and metal smithing practices.

N ART 975   Stained Glass for Older Adults
16-18 hours lecture – 32-36 hours laboratory
This course will cover a range of two- and three-dimensional approaches to working in stained glass from design to construction, serving as a means for older adults to engage creativity, and maintain dexterity and mental acuity.

Apprenticeship (N AP PRE)

Contact the Occupational & Noncredit Programs Department at 760-744-1150, ext. 2284 for further information and registration procedures.

Pre-Apprenticeship

The Pre-Apprenticeship program is designed to prepare students with the skills needed to be successful in the construction industry. Areas that will be addressed have been identified as skills that are needed to increase success rates for passing apprenticeship entrance assessments and to increase graduation rates in apprenticeship programs.

Program Requirements
N AP PRE 901   Introduction to the Construction Trades Industry
N AP PRE 902   OSHA 10 Certification
N AP PRE 903   Red Cross Adult First Aid/CPR/AED
N AP PRE 906   Essential Skills
N AP PRE 908   Construction Math
N AP PRE 909   Blueprint Reading
N AP PRE 910   Tools
N AP PRE 920   Carpentry - Hands On Skills
                or
N AP PRE 930   Electrician - Hands On Skills
                or
N AP PRE 940   Sheet Metal - Hands On Skills

COURSE OFFERINGS

N AP PRE 901 Introduction to the Construction Trades Industry
25-54 hours lecture - 20-40 hours laboratory
This course provides participants an introduction to the construction trades industry, with specific emphasis on the electrical industry, sheet metal industry, and carpentry, as a basis for working in all other trades. After successful completion, participants will have general knowledge and skills needed to choose and prepare for advanced training in the pre-apprenticeship program and then to seek further knowledge in a state-approved apprenticeship program.

N AP PRE 902 OSHA 10 Certification
10 hours lecture
OSHA 10-Hour Construction is a part of an online OSHA outreach program that results in a valid DOL/OSHA 10-Hour Card. This OSHA10 online training course teaches recognition, avoidance, abatement and prevention of safety and health hazards in workplaces. This course also provides information regarding workers? rights, employer responsibilities and how to file a complaint. It was also designed to help workers stay up-to-date with their OSHA safety requirements.

N AP PRE 903 Red Cross Adult First Aid/CPR/AED
5-7 hours lecture - 5-7 hours laboratory
This course will prepare students to recognize and care for a variety of first aid, breathing, and cardiac emergencies involving adults and meets OSHA/workplace requirements. These courses are designed for anyone with little or no medical training who needs a course completion card (CPR/AED First Aid) for job, regulatory (e.g., OSHA), or other requirements. These courses can also be taken by anyone who wants to be prepared for an emergency in any setting. After completing the online portion, students will attend a structured, Instructor-led, hands-on session that focuses on meaningful coaching, skills practice, and skills testing. This course will prepare you to recognize and care for a variety of first aid, breathing, and cardiac emergencies involving adults and meets OSHA/workplace requirements.

N AP PRE 906 Essential Skills
8 hours lecture - 8 hours laboratory
Essential skills will address the following competencies as keys to the success of workers: Communication; Networking; Enthusiasm and Attitude; Teamwork; Problem Solving and Critical Thinking; and Professionalism.

N AP PRE 908 Construction Math
48-54 hours lecture - 16-18 hours laboratory
This course provides the participants with an overview of the mathematics used in the industry. These include but are not limited to: basic arithmetic operations, integers, fractions, decimals, percents, ratio and proportion, basic geometric concepts and measurement, problem-solving techniques, and an introduction to algebraic thinking.

N AP PRE 909 Construction Print Reading
6-16 hours lecture - 6-16 hours laboratory
This course will cover the fundamental functions and structure of construction prints. Course content will include construction drawings, line symbols, freehand sketching, and pictorial drawings.

N AP PRE 910 Tools
24 hours lecture - 24 hours laboratory
This course provides the participants with an overview of measuring, marking, layout, hand, power, and fastening tool use and safety considerations when using these tools.

N AP PRE 920 Carpentry - Hands On Skills
10-24 hours lecture - 15-72 hours laboratory
Carpentry Hand Skills continues where N-AP-PRE 901 left off in carpentry topics. This course will review carpentry trade skills and develop advanced skills in carpentry trades with the use of project based learning.

N AP PRE 930 Electrician - Hands On Skills
20-30 hours lecture - 15-30 hours laboratory
Introduction to the electrical industry, with emphasis on jobsite safety, basic conduit bending, National Electric Code (NEC), sexual harassment, introduction to blueprints, tools and their use. Particular attention will be given to fastening devices, basic mathematics, resistance, voltage, power in DC series, parallel, and combination circuits.

N AP PRE 940 Sheet Metal - Hands On Skills
15-30 hours lecture - 15-20 hours laboratory
This course provides an introduction to the basic principles, processes, drawings and materials used in the sheet metal industry.

Basic Education (N BASC)

Contact the Occupational & Noncredit Programs Department at 760-744-1150, ext. 2155 for further information and registration procedures.

College Preparation Certificate of Competency

This program is designed to help prepare students for college level English and Mathematics.

Program Requirements
N READ 950   Reading and Language Arts
N MATH 915   Mathematical Literacy

COURSE OFFERINGS

N BASC 900 Literacy/Adult Basic Education
64-96 hours lecture
This course is designed to help learners improve basic reading skills, critical thinking skills, computational skills, and writing skills; to develop skills for the workplace; and to prepare for future educational opportunities. Learners participate in an individually prescribed program which includes classroom activities, independent activities, collaborative learning, and mediated learning.

N BASC 903 Supervised Tutoring for Access Technology
8-72 hours laboratory
This course provides supplemental instruction for individual students to improve their knowledge and abilities with access technology. Learners participate in a program which includes lab activities, independent activities and tutor-assisted learning.

N BASC 904 Supervised Tutoring
64-96 hours laboratory
This course provides supplemental instruction for individual students to improve their knowledge and abilities. Learners participate in a program which includes classroom and lab activities, independent activities, collaborative learning, mediated learning and tutor-assisted learning.

Business Management (N BMGT)

Contact the Business Administration Department for further information.
760-744-1150, ext. 2488
Office: MD-341

Project Management
Certificate of Competency (N BMGT)

In this five-course program, students are prepared to add value across numerous disciplines as a Project Manager, either in the form of direct employment or as an independent consultant. The ensemble of courses are focused on developing the skills to facilitate projects from start to finish. Students learn both methodology and best practices with the ultimate goal to prepare for industry certification as recognized by The Project Management Institute (PMI).

Program Requirements
N BMGT 986   Project Management: Integration & Scope Management
N BMGT 987   Microsoft Project Management
N BMGT 988   Procurement Management; Quality, Cost, and Risk
N BMGT 989   Leadership and Conflict Resolution
N BMGT 990   Capstone; Bringing it all together

COURSE OFFERINGS

N BMGT 954 Business Canvas
12-32 hours lecture
To fast track your start up business, identify the nuts-and-bolts of a working business plan that you grow with as you develop your business. The Business Canvas will keep you on-point and focused as you achieve your goals and scale your start-up.

N BMGT 986 Project Management: Integration & Scope Management
32 hours lecture
This course trains students on the integration of processes and activities within project management's 5 Process Groups. Students will be exposed to choices related to resource allocation, competing objectives, managing inter-dependencies, and across key Knowledge Areas.

N BMGT 987 Microsoft Project Management
32 hours lecture
Hands-on application with Microsoft Project, a comprehensive software package that includes the processes of initiating, planning, executing, controlling, and closing a project to meet project goals. Students will be exposed to PM tools and techniques for scheduling, planning, updating, and change control.

N BMGT 989 Leadership and Conflict Resolution

18 hours lecture

This course offers an in-depth study of the human relations side of Project Management. In this course, students will learn about organization theory, leadership and conflict resolution, and effective communication.

N BMGT 990 Capstone; Bringing it all together

36 hours lecture

This course offers an intense review of the Project Management Body of Knowledge (PMBOK) for purposes of preparing for one of the Project Management certification exams. This course is a review of key knowledge areas and processes, and is intended for individuals who have experience in the field of project management or who have completed PM specific course work.

Career and Technical Education (N CTED)

See (also)Tutoring

COURSE OFFERINGS

N CTED 901 Community Emergency Response Team

(Formerly N HSED 901)

24-30 hours lecture

Provides instruction and basic skills to private citizens which enable them to assist first responders and other community members in the aftermath of a disaster.

Citizenship (N CTZN)

Contact the English as a Second Language Department for further information and registration procedures at 760-744-1150, ext. 2272/8114.

COURSE OFFERINGS

N CTZN 900 Citizenship

18 to 48 hours lecture

A general survey of U.S. history, government and civics, including culture, institutions, and use of community services and agencies. Designed to assist eligible individuals to become United States citizens. Includes practice of oral/aural/literacy skills in English necessary to pass an oral and written test with a United States Citizenship and Immigration Services official.

Computer Science and Information Technology - Information Technology (NCSIT)

Contact the Computer Science and Information Technology Department for further information.
760-744-1150, ext. 2387
Office: MD-275
http://www.palomar.edu/csit

N CSIT 900   Digital Literacy - Computer Fundamentals for Older Adults

24-48 hours laboratory

Designed for older adults, this course teaches students to make the most of technology. The course covers computer hardware, software, operating systems, peripherals, and troubleshooting. Mobile Device and Cloud Computing concepts are also explored.

Disability Education (N DSAB)

Contact the Disability Resource Center at 760-744-1150, ext. 2375 for further information and registration procedures.

COURSE OFFERINGS

N DSAB 901 Independent Living Skills

48-150 hours laboratory
5 hours lecture/laboratory

This course will provide independent living skills for the developmentally delayed, the adult acquired brain injury population, and the adventitiously blind population and stresses the practical application of basic skills and their use in daily life situations. Certain aspects of the course may be adapted to meet the specific needs of the student population being taught.

N DSAB 943 Access Technology for Vision Loss

48-54 hours lecture
Note: Pass/No Pass grading only

This course provides additional support for students with low vision or blindness as they learn to use access technology. Learners participate in a program which includes lab activities, assistive technology assessment and training.

English as a Second Language (N ESL)

Contact the English as a Second Language Department for further information and registration procedures at 760-744-1150, ext. 2272/8114.

COURSE OFFERINGS

N ESL 901   Beginning ESL I *(Formerly N ESL 301)*

48 to 192 hours lecture

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

N ESL 902   Beginning ESL II *(Formerly N ESL 302)*

48 to 192 hours lecture

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

N ESL 903   Beginning ESL III *(Formerly N ESL 303)*

48 to 192 hours lecture

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

N ESL 904   Intermediate ESL I *(Formerly N ESL 304)*

48 to 192 hours lecture
Note: Pass/No Pass/Satisfactory Progress

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

N ESL 909   English Pronunciation I *(Formerly N ESL 9)*

48-54 hours lecture
Note: Pass/No Pass/Satisfactory Progress

Development of students' ability to identify and replicate English intonation, stress patterns, and certain common word combinations as they are pronounced in informal speech.

N ESL 910   English Pronunciation II *(Formerly N ESL 10)*

48-54 hours lecture
Note: Pass/No Pass/Satisfactory Progress

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.

N ESL 912   ESL Grammar Skills I *(Formerly N ESL 12)*

48-54 hours lecture

Instruction in editing of written material by applying basic conventions of standard written English.

N ESL 913   ESL Grammar Skills II *(Formerly N ESL 13)*
48-54 hours lecture
Note: *Pass/No Pass/Satisfactory Progress*
Instruction in editing of written material by applying intermediate-level conventions of standard written English.

N ESL 914   ESL Grammar Skills III *(Formerly N ESL 14)*
48-54 hours lecture
Note: *Pass/No Pass/Satisfactory Progress*
Instruction in editing of written material by applying advanced conventions of standard written English.

N ESL 920   Academic Speaking and Listening
48 to 54 hours lecture
Note: *Pass/No Pass/Satisfactory Progress*
Develops speaking and listening skills necessary for non-native speakers of English to be successful in the college environment. This class emphasizes linguistic and interpersonal skills in order for participation in discussions and performance of tasks in personal, academic, and formal or informal situations. Vocabulary, conversation strategies, presentation techniques, and strategies for note-taking and listening for main ideas and details are introduced within interesting and meaningful contexts.

N ESL 922   Beginning Conversation *(Formerly N ESL 322)*
330 to 72 hours lecture
Note: *May be open entry/open exit*
Conversation skills for non-native speakers of English at the mid and high beginning level.

N ESL 923   Beginning Conversation 2
30 to 72 hours lecture
Conversation skills for non-native speakers of English at the high-beginning and low intermediate level. This course focuses on the practice of initiating and sustaining conversations about different topics.

N ESL 941   Academic ESL Review
48-96 hours lecture
Designed to help ESL learners improve their academic reading and writing skills and review basic academic grammar and vocabulary. Emphasizes student success strategies and study skills that will help students be successful in their learning. The course is an academic ESL reading and writing skills development/ refresher course.

N ESL 945   Reading and Writing Essentials I *(Formerly N ESL 45)*
80-90 hours lecture
Note: *Pass/No Pass/Satisfactory Progress*
A beginning course in reading and writing academic English for students whose first language is not English. Offers instruction in reading skills, basic grammar usage, paragraph organization and development, and appropriate basic vocabulary for academic reading and writing.

N ESL 955   Reading and Writing Essentials II *(Formerly N ESL 55)*
80-90 hours lecture
Note: *Pass/No Pass/Satisfactory Progress*
An intermediate course in reading and writing academic English for students whose language is not English. Introduces analytical skills and critical thinking through reading, word level, and sentence level grammar as it applies to academic writing, paragraph organization and development, and appropriate vocabulary for academic writing.

N ESL 961   Beginning Level Listening and
             Speaking I *(Formerly N ESL 361)*
32 to 80 hours lecture
Listening and speaking for non-native speakers of English at the low-beginning level.

N ESL 962   Beginning Level Listening and
             Speaking II *(Formerly N ESL 362)*
32 to 80 hours lecture
Listening and speaking for non-native speakers of English at the mid-beginning level.

N ESL 963   Beginning Level Listening and
             Speaking III *(Formerly N ESL 363)*
32 to 80 hours lecture
Listening and speaking for non-native speakers of English at the high beginning level.

N ESL 964   Intermediate Level Listening
             and Speaking *(Formerly N ESL 364)*
32 to 80 hours lecture
Listening and speaking for non-native speakers of English at the intermediate level. This course focuses on listening and speaking skills required in a work or academic environment. Included are listening for the main idea and supporting details in academic and non-academic discourse and giving short work or school-related presentations.

N ESL 971   Written Communication I
80-90 hours lecture
A review of word-level and sentence-level grammar, paragraph organization, paragraph development, development of the multi-paragraph essay, and appropriate vocabulary for academic writing. Emphasizes writing as a process; develops analytical skills and critical thinking.

N ESL 972   Basic ESL Skills *(Formerly N ESL 372)*
36-96 hours lecture
Basic literacy and conversation development for non-native speakers of English.

N ESL 973   Written Communication III
80-90 hours lecture
This course provides practice in essay writing based on analytical reading and critical thinking. Topics include writing as a process, organization and development, rhetorical strategies, research strategies, synthesis of sources to support a writing topic, and critical reading. Readings from culturally diverse traditions provide exposure to a range of genres and a broader cultural understanding of the world.

N ESL 975   Accelerated Written Communication I
96-108 hours lecture
An accelerated course in academic reading and writing. Designed for students whose first language is not English. Emphasizes analytical and critical thinking skills through reading and writing as a process. Reviews sentence-level grammar and its application to academic writing of summaries and development of paragraph organization and multiple-paragraph essays.

N ESL 976   Accelerated Written Communication II
108 hours lecture
An accelerated course in reading and writing designed for non-native speakers of English. This course features practice in essay development using appropriate vocabulary and source support. It develops students' abilities to critically analyze and respond both objectively and subjectively to published materials from culturally diverse traditions. Topics include writing as a process, essay organization, rhetorical strategies, research strategies, synthesis of sources to support a writing topic, and critical reading. Readings provide exposure to a range of genres and a broader cultural understanding of the world.

N ESL 982   Computer Skills 1 – Foundational Skills
32 – 72 hours laboratory
Note: *Pass/No Pass/Satisfactory Progress*
Basic computer literacy and skills development for non-native speakers of English. This course is designed for students who have little or no experience using a computer. Topics include basic computer vocabulary, basic computing processes, Internet skills and concepts, and basic electronic mail.

N ESL 983   Computer Skills 2 – Office Applications
32 – 72 hours laboratory
Note: *Pass/No Pass/Satisfactory Progress*
Basic computer literacy and skills development for non-native speakers of English. This course is designed for students who have little or no experience using a computer. Topics include computer vocabulary, file management skills, word processing, electronic presentations, and electronic spreadsheets.

N ESL 984   Computer Skills 3 – The Digital Age
32 – 72 hours laboratory
Note: *Pass/No Pass/Satisfactory Progress*
Basic computer literacy and skills development for non-native speakers of English. This course is designed for students who have little or no experience using a computer. Topics include computer vocabulary, mobile technology, online learning apps, e-commerce, social media, Internet security, and Internet of things.

**N ESL 990   English as a Second Language Support
                for Pre-Apprenticeship Courses 1**
16 – 72 hours lecture
English as a Second Language instruction and practice for intermediate to advanced ESL students to develop skills for success in a Pre-Apprenticeship program. This course focuses on reading, vocabulary, listening and speaking skills required for work in the construction trades industry.

N ESL 994   Career Track ESL (Formerly N ESL 394)
16 to 80 hours lecture
Note: *May be open entry/open exit*
English as a Second Language instruction in preparation for a certificate or degree program. Self-paced modules provide an introduction to complementary language and academic skills necessary to succeed in a career or extended education program. Includes reading, writing, speaking, listening, and introductory to advanced computer literacy skills.

N ESL 995   English as a Second Language Support Course
16 to 72 hours lecture
English as a Second Language contextualized support instruction to prepare intermediate to advanced ESL students for success in a credit or noncredit certificate or degree program. Course instruction focuses on reading, writing, listening and speaking skills necessary to succeed in a specified career or education program.

Geography (N GEOG)

Contact the Earth, Space, and Environmental Sciences Department for further information.
760-744-1150, ext. 2512
Office: NS-110G

COURSE OFFERINGS

N GEOG 900 Introduction to Drone Safety and Applications
18 hours lecture
A survey of the regulations governing small unmanned aircraft systems (sUAS) operations and safety considerations. Existing and emerging trends of sUAS applications in various industries will also be discussed.

Health and Safety Education (N HSED)

See (also) Career and Technical Education (N CTED)
Contact the Occupational & Noncredit Programs Department at 760-744-1150, ext. 2284 for further information and registration procedures.

No current course offerings.

Medical Professions (N MEDC)

Contact the Emergency Medical Education Department for further information and registration procedures at 760-744-1150, ext. 8150.

Medical Professions Prep Certificate of Competency

This course is designed to help prepare students who are pursuing a certificate of completion in Nursing or Paramedic Training by providing an introduction and overview of the principles of cardiology to include the basic anatomy and physiology of the heart and basic EKG interpretation as well as an introduction to med math, medical terminology and study skills to include how to navigate and read the required textbooks.

Program Requirements
N MEDC 901   Medical Professions Preparatory Module 1
N MEDC 902   Medical Professions Preparatory Module 2
N MEDC 903   Medical Professions Preparatory Module 3

Mathematics (N MATH)

Contact the Mathematics Department for further information.
760-744-1150, ext. 2535
Office: P-2

COURSE OFFERINGS

N MATH 915 Mathematical Literacy
4 – 5 hours lecture
This course is designed to help students improve numeracy, computational skills and algebraic thinking to prepare for employment and future educational opportunities.

Music (N MUS)
See Music (MUS) for Credit Music Courses

Contact the Performing Arts Department at 760-744-1150, ext. 2316 for more information. See Music (MUS) for Credit Music Courses

COURSE OFFERINGS

N MUS 937   Afro-Cuban and Brazilian Drumming for Older Adults
24 - 54 hours laboratory
Drum, percussion and song classes in the traditions of Escola de Samba from Rio de Janeiro, Brazil and Afro-Cuban traditions, popular and folkloric; Rumba, Congo (Makuta/Palo), Franco/Haitian (Gaga/Congo Layet) from East and West Cuba for older adults. Develop ability to work as a drum ensemble.

N MUS 948   Community Chorale for Older Adults
48-54 hours laboratory
Limitation on Enrollment: Enrollment subject to audition
This ensemble for the older adult rehearses and performs repertoire from the standard oratorio and choral literature. Emphasis is placed on stylistic and historical performance practices, vocal technique, and musicianship. Performances are combined with the Palomar Chorale and are held on campus and in the community.

N MUS 951   Community Concert Band for Older Adults
48-54 hours laboratory
Limitation on Enrollment: Enrollment subject to audition
This ensemble for the older adult rehearses and performs classics from the standard concert band literature. Emphasis is placed on stylistic and historical performance practices, instrumental techniques, and musicianship. Performances are combined with the Palomar Concert Band and are held on campus and in the community.

N MUS 952   Community Jazz Ensemble for Older Adults
48-54 hours laboratory
Limitation on Enrollment: Enrollment subject to audition
This ensemble for the older adult rehearses and performs standard stage band literature, with opportunities for students to arrange and compose for the band, and rehearse the ensemble. Emphasis is placed on stylistic and historical performance practices, instrumental and vocal techniques, and musicianship. Performances are combined with the Palomar Jazz Ensemble and are held on campus and in the community. Attendance at all scheduled performances is required.

N MUS 955   Community Brass Ensemble for Older Adults
48-54 hours laboratory
Limitation on Enrollment: Enrollment subject to audition
This ensemble for the older adult rehearses and performs chamber music literature for brass. Emphasis is placed on stylistic and historical performance practices, brass-specific instrumental techniques, and musicianship. Performances are combined with the Palomar Brass Ensemble and are held on campus and in the community.

N MUS 972   Community Repertory Jazz Band for Older Adults
48-54 hours laboratory
Limitation on Enrollment: Enrollment subject to audition
This ensemble for the older adult rehearses and performs professional level materials for the large jazz ensemble. Emphasis is placed on stylistic and historical performance practices, instrumental and vocal techniques, and musicianship. Performances are combined with the Palomar Repertory Jazz Ensemble and are held on campus and in the community.

N MUS 998   Community Symphony Orchestra for Older Adults
48-54 hours laboratory
Limitation on Enrollment: Enrollment subject to audition
This ensemble for the older adult rehearses and performs classics from the standard symphony orchestra literature including works for string and full ensembles. Emphasis is placed on stylistic and historical performance practices, instrumental techniques, and musicianship. Performances are combined with the Palomar Symphony Orchestra and are held on campus and in the community.

Photography (N PHOT)

Contact the Media Studies Department for further information.
760-744-1150, ext. 2440
Office: P-31

COURSE OFFERING

N PHOT 916 Alternative Photographic Processes for Older Adults
48-54 hours laboratory
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, Kallitype, Bromoil,Collodion and gum printing.

N PHOT 920 Getting to Know Lightroom for Older Adults
24-27 hours lecture - 72-81 hours laboratory
Designed for older adults, this class will explore the capabilities and uses of the digital darkroom using the industry standard Adobe Lightroom. Students will learn to shoot and Photographic editing will include white balance, contrast, lens correction, sharpening and HSL adjustments. The principles asset management, naming conventions, importing, exporting digital image files. Photographic digital images will be corrected for tone, color balance, resolution and size and the learning path will employ the principles of image editing software to correct, improve and ready photographic digital images for digital output.

N PHOT 930 Digital Darkroom I for Older Adults
24 hours lecture – 72 hours laboratory
The technology of digital photography, the computer, and inkjet printers. Emphasis on industry standard image editing software as the primary photographic processing and manipulation tools. Continuing instruction in digital image processing directed toward photographic output. Development of capabilities and use of the "digital darkroom".

N PHOT 950 Getting to Know your Digital Camera for Older Adults
Designed for older adults, the beginning principles and use of digital cameras. 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 students assignments.

Reading (N READ)

Contact Reading Services for further information.
760-744-1150, ext. 2568
Office: H-119C

COURSE OFFERINGS

N READ 931 Developmental Reading Skills
32 – 64 hours lecture
A computer-assisted instruction program based on individual student diagnosis to improve vocabulary and literal reading comprehension skills. Weekly lectures will focus on specific vocabulary development and basic comprehension strategies.

N READ 932 Intermediate Reading Skills
32 – 64 hours lecture
An individualized computer-assisted instruction program based on individual student diagnosis to improve students' command of denotative and connotative vocabulary, and literal/analytical reading.

N READ 949 Introduction to College Reading Skills
32 to 64 hours lecture
A course designed to improve the student's fluency in vocabulary and literal comprehension skills needed to read and analyze independent reading material, as well as expository material such as textbooks and technical articles. Given a variety of instructional techniques and independent practice, students will improve the skills necessary to read at or above the 10th grade level.

N READ 950 Reading and Language Arts
32 – 64 hours lecture
This course is designed to aid students in the development of basic reading and writing skills, including critical thinking, in order to prepare them for the workforce and future educational opportunities.

Tutoring (N BASC)

Contact the STAR Tutoring Center at 760-744-1150, ext. 2448 or go to the Palomar Tutoring Webpage at http://www2.palomar.edu/tutoringservices/ for contact information.

COURSE OFFERINGS

N BASC 901 Algebra Review
24-48 hours lecture
Review of topics, skills and problem solving techniques from prealgebra, beginning algebra, intermediate algebra, college algebra and/or trigonometry based on individual student needs as determined by diagnostic tests. Intended for students who need to refresh their algebra and/or prealgebra skills prior to taking their next math class or to improve their math placement level on the math assessment test. Review concepts and problem solving techniques from beginning algebra, with emphasis on basic operations with signed number polynomials and linear functions.

N BASC 902 Supervised Tutoring
16 hours laboratory
This course provides supplemental instruction in academic subjects for individual students to improve their knowledge or abilities in the tutored subject.

N BASC 904 Supervised Tutoring
64-96 hours laboratory
his course provides supplemental instruction for individual students to improve their knowledge and abilities. Learners participate in a program which includes classroom and lab activities, independent activities, collaborative learning, mediated learning and tutor-assisted learning.

N CTED 905 Basic Tutoring Training and Certification
20-32 hours laboratory 20-32 hours laboratory
Note: *Pass/No Pass grading only*
This course will teach college students to tutor other college students through lectures, discussions, video tapes, and practical experience.

Kristin Marjanovic
Economics, History,
and Political Science (FT)

Barbara Springer Hammons
Child Development (PT)

Amy Caterina
Media Studies (FT)

Leanne Farmer
Health and
Kinesiology (PT)

Jim Fent
Behavioral Sciences (FT)

Jenny Fererro
Child Development (FT)

Tucker Grimshaw
English (PT)

Lakshmi Paranthaman
Business Administration
(FT)

Russell Sheaffer
Media Studies (PT)

Suzanne Woodward
English as a
Second Language
(PT)

Anastasia Zavodny
Business Administration/
Economics, History and
Political Science (PT)

Eli Ziade
Mathematics (FT)

2019-2020 DISTINGUISHED FACULTY AWARD FOR EXCELLENCE IN TEACHING

Section 10
Faculty and Educational Administrators

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 part-time faculty.

The year indicated after each employee's name is the year first appointed to the Palomar College permanent academic staff.

Adams, Carol L. (2004) Early Childhood Education Center
A.A., Palomar College
B.A., Ashford University
Child Development Site Supervisor Permit

Aegerter II, John G. (2000) Health, Kinesiology and Recreational Management/Athletics
B.S., University of Wyoming
M.Ed., Azusa Pacific University

Aguilera, Anna V. (2005) Extended Opportunity Programs and Services
B.A., University of California, Irvine
M.S., California State University, Long Beach

Aguilar, Eduardo (2019) Multicultural Studies
B.A., University of California Riverside
M.A., University of California Los Angeles

Aguirre, Leticia (2016) Counseling
B.A., San Diego State University
M.S.W., San Diego State University

Ahmadi, Mejghan S. (2016) Counseling
B.S., San Diego State University, San Diego
M.A., University of Colorado

Albistegui-Dubois, Richard M. (2006) Biology
B.A., University of California, Santa Cruz
Ph.D., University of California, Los Angeles

Alexander, Efrem (2018) Counseling
B.A., Loyola Marymount University, Los Angeles
M.Ed., Point Loma Nazareen University, San Diego

Alidaee, Bahram (2001) Mathematics
B.S., Roosevelt University, Chicago
M.S., California State University, San Marcos

Anderson, Jennifer (2016) Trade and Industry
B.S., University of California, Davis
M.F.A., San Diego State University

Anderson, Laurel J. (2011) Child Development
B.A., Augustana College
B.S., Minnesota State University, Mankato
M.S., Minnesota State University, Mankato
Ph.D.,Capella University

Andrews, Michael (2019) Director, Public Safety Programs
B.A., Union Institute & University, Cincinnati, OH

Andrews, Shannon (2017) Chemistry
B.S., University of California, San Diego
M.S., University of California, San Diego
M.A., Dominican University, River Forest

Anfinson, Cynthia J. (1996) Mathematics
B.A., University of California, San Diego
M.S., Cornell University

Antonecchia, Rosa I. (2001) Counseling
B.S., California State University, Fullerton
M.A., San Diego State University

Arguello, Michael T. (1991) Economics, History & Political Science
B.A., St. Mary's College of California, Moraga
M.A., San Diego State University
Ph.D., University of California, San Diego

Backman, Jennifer A. (2011) English
B.A., University of California, San Diego
M.A., The University of Chicago
Ph.D., Purdue University

Backman, Russell (2019), English
B.A., University of California, Berkeley
M.A., University of Chicago
Ph.D., University of California, Davis

Bagaglio, Melissa (2019), English
B.S., University of Evansville
M.A., The University of Memphis
Ph.D., The University of Memphis

Barlolong, Christine E. (2016) Counseling
B.S., Cal State University, San Marcos
M.A., University of San Diego

Barnaba, Ruth V. (1998) Tutorial Services
B.A., University of California, San Diego
M.A., United States International University

Barnes, Juliette (2017) Police Academy Coordinator
Casas, Lisa (2017) Early Childhood Education Center
A.A., Palomar College
B.A., California State University, San Marcos
M.A., Pacific Oaks College, Pasadena

Barrett, Kevin (1992) Public Safety Programs
A.A.S., Westchester Community College
B.S., Iona College
M.A., John Jay College of Criminal Justice, CUNY

Barton, Michelle A. (2002)
Institutional Research and Planning
B.A., San Diego State University
M.S., San Diego State University

Basinski, Talitha (2019) Nursing Education
A.A., Palomar College
B.S., Western Governors University
M.S., Western Governors University

Bealo, Mark J. (2001) Graphic Communications
A.A., Palomar College
B.S., California State University, San Marcos

Bertram, Steven L. (1994) Trade and Industry
A.A., Palomar College
A.B., San Diego State University
M.A., San Diego State University

Blankenship-Williams, Lesley E. (2008) Biology
B.A., University of California, Santa Cruz
M.S., University of California, San Diego
Ph.D., University of California, San Diego

Bongolan, Glyn E. (2006) Counseling
B.A., University of California, San Diego
B.S., University of California, San Diego
M.A., San Diego State University
Ph.D., San Diego State University

Bowman, Peter J. (2004) Economics, History & Political Science
B.A., University of California, San Diego
M.A., Arkansas State University

Boyle, Patricia (2019), Emergency Medical Education
A.A., Palomar College
A.S., San Diego Miramar College
6+ Years of Experience

Brandon, Patricia A. (2004) Chemistry
B.S., California State University, Hayward
M.S., California State University, Fullerton

Briceno, Jose C. (2015) Behavioral Sciences
B.A., California State University San Marcos
M.A., California State University San Marcos

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 R. (2000) Performing Arts
B.A., State University of New York, Stony Brook
M.M., Brooklyn College
D.M.A., City University of New York

Campo Griggs, Rita (2011) Design and Manufacturing Technologies
A.A., Cerritos College
B.A., San Diego State University

Canon, Terrie L. (2000) Computer Science and Information Systems
B.S., University of California, Santa Barbara
M.S., National University

Carmichael, Lisa J. (2006) Media Studies
A.A., Edison College
B.A., National University

Carpenter, A. Carey (1997) Biology
B.S., University of California, Riverside
Ph.D., University of California, Berkeley

Carrasco, William (2019) World Languages
B.A., Arizona State University
M.A., Arizona State University
Ph.D., University of Toulouse

Carrillo, Luz D. (2016) Chemistry
B.S., University of Wisconsin - Madison
M.A., The University of Texas at Austin
Ph.D., The University of Texas at Austin

Casas, Lisa (2017) Early Childhood Education Center
A.A., Palomar College
B.A., California State University, San Marcos
M.A., Pacific Oaks College, Pasadena

Cassoni, Mary J. (2005) Business Administration
B.A., Boston University
M.B.A., San Diego State University

Caterina, Amy (2015) Media Studies
B.F.A, State University of New York College, Buffalo
M.F.A., California State University, Fullerton

Cecere, Rosemarie L. (2001) Media Studies
B.A., University of California, San Diego
M.A., The New School

Chakkanakuzhi, Mathews T. (1995) Mathematics
B.S., California State University, Los Angeles
M.S., California State University, Los Angeles

Chamberlin, Craig S. (2001) Mathematics
A.A., Palomar College
B.S., Northern Arizona University
M.S., Northern Arizona University

Cheung, Wing H. (2007) Earth, Space, and Environmental Sciences
B.A., Unversity of California, Los Angeles
M.S., Indiana University
M.P.A., Indiana University
Ph.D., University of California, Irvine

Christensen Gwin, Catherine (2016) Economics, History & Political Science
B.A., University of California, Los Angeles
Ph.D., University of California, Irvine

Christensen, Kimberly T. (2014) Mathematics
M.A., University of California, Santa Barbara
B.S., University of California, Santa Barbara

Clark, Mark D. (1996) Mathematics
B.S., California State University, Long Beach
M.S., California State University, Long Beach

Clark, William (2109), Emergency Medical Education
A.A., Palomar College
A.A., Palomar College
A.A., Crafton Hills College
2+ Years of Experience

Clegg, Daniel K. (1995) Mathematics
B.A., California State University, Fullerton
M.A., University of California, Los Angeles

Colbert, Amber (2019), Behavioral Sciences
B.A., California State University, Long Beach
M.A., San Jose State University

Cook-Whearty, Marquesa J. (2015) Speech Communication/Forensics/ASL
B.A., University of California, San Diego
B.S., California State Polytechnic University
M.A., San Diego State University

Cordova, Cynthia (2018) Counseling
A.A., Mira Costa College
B.A., California State University, San Marcos
M.S., California State University, Northridge

Cory, Abbie L. (2006) English
B.A., California State University, Long Beach
M.A., University of California, San Diego
Ph.D., University of California, San Diego

Craft, Lacey J. (2010) Health, Kinesiology and Recreational Management/Athletics
B.S., Azusa Pacific University
M.S., San Diego State University

Crook, Stephen (2019) Earth, Space, and Environmental Sciences
B.A., University of California, Los Angeles
M.Sc., University of Oxford

Cunningham, April D. (2013) Library
B.A., University of California, San Diego
M.A., University of California, Los Angeles
Ed.D., California State University, Fullerton

Dawber, Christina (2016) CalWORKs
B.A., University of California Berkeley
M.A., San Diego State University
Ph.D., University of California San Diego

De Simone, Sarah M. (2013) Emergency Medical Education
B.A., The University of Louisiana
M.A., University of Phoenix

Deal, Michael S. (2013) Biology
B.A. University of California, Santa Barbara
Ph.D., University of North Carolina

DeMaris, Patricia J. (1988) Counseling
B.A., Rutgers University/Douglas College
M.S., San Diego State University

Dixon, Patricia Ann (1971) American Indian Studies
B.A., University of San Diego
M.A., University of San Diego

Dodson, Kenneth J. (2008) Graphic Communications
A.A., Palomar College

Doherty, Matthew (2017) Biology
B.S., Portland State University
M.S., San Diego State University

Donovan, Karen (2009) Nursing Education
B.S., University of Phoenix
M.S., California State University Dominguez Hills

Dominguez, Ladylyn (2018) Counseling
B.S., California State University, San Marcos
M.S., National University, San Diego

Doyle Bauer, Alexandra E. (2016) Library
B.A., California State University, San Marcos
M.L.I.S., San Jose State University

Dudley, Michael (2017) Behavioral Sciences
B.A., Wabash College
M.S., University of Kentucky
Ph.D., University of Kentucky

Early, Daniel F. (2004) Health, Kinesiology and Recreational Management /Athletics
A.A., Palomar College
B.A., California State University, Long Beach
M.Ed., Azusa Pacific University

Early, Joseph D. (1996) Health, Kinesiology and Recreational Management /Athletics
B.S., San Diego State University
M.Ed., Azusa Pacific University

Eighmey, James D. (2007) Behavioral Sciences
B.G.S., University of Kansas
M.A., San Diego State University

Ellis, Mona J. (2006) Mathematics
B.S., New Mexico Institute of Mining and Technology
M.A., University of California, San Diego

Emerick, Ryan D. (2005) Behavioral Sciences
B.A., University of Richmond
M.A., University of California, Riverside
M.A., King's College London, University of London
Ph.D., University of California, Riverside

Epstein, Jeffrey H. (2015) Behavioral Sciences
B.A., University of California, Santa Cruz
M.A., American University
M.A., State University of New York College, Stony Brook
Ph.D., State University of New York College, Stony Brook

**Estes, Matthew T. (2005) Economics,
History & Political Science**
B.A., San Diego State University
M.A., San Diego State University

**Falcone, Kelly A. (2006) Health, Kinesiology and
Recreational Management /Athletics**
B.S., San Diego State University
M.A., San Diego State University

Farrell, Katy (2006) Reading Services
B.A., State University of New York at Genesco
M.L.S., Queens College City University of New York
M.A. University of California, San Diego

Faulkner, Margaret M. (2002) Performing Arts
B.F.A., University of Arizona
M.F.A., University of Iowa
Ph.D., Texas Woman's University

Fedon, Anthony R. (2013) Trade and Industry
Eminence in the Field

Feld, Erin C. (2011) Reading Services
B.A., Temple University
M.A., San Diego State University
M.A., San Diego State University

Fent, James A. (2013) Behavioral Sciences
B.S., Loma Linda University
M.S., University of La Verne

Fererro, Jennifer M. (2004) Child Development
B.A., University of Colorado
M.S., San Diego State University

**Figg, Sean A. (2013) Earth, Space,
and Environmental Sciences**
B.S., University of Minnesota
M.A., University of Northern Colorado

Finkenthal, Daniel F. (1997) Physics and Engineering
B.S., University of Lowell
Ph.D., University of California, Berkeley

Finton, Michael J. (1999) Emergency Medical Education
A.D.N., Santa Ana College

Flores, Karmi (2018) Counseling
B.S., San Diego State University
M.A., San Diego State University

Forney, Craig A. (2007) Behavioral Sciences
B.A., Fresno Pacific University
M.A., The University of Chicago
Ph.D., The University of Chicago

Forney, Marlene G. (2008) Library
B.A., Purdue University
A.M.L.S., University of Michigan, Ann Arbor

**Fritch, Margie. (2016) Dean, Instructional,
Career, Technical, and Extended Education**
A.S., Grossmont College
B.S., San Diego State University
M.A.E., United States International University

Fung, Tracy L. (2005) English as a Second Language
B.A., California Polytechnic State University, San Luis Obispo
M.A., San Diego State University

Garcia Villa, Hector (2016) Physics and Engineering
B.S., University of Barcelona
M.A., University of Barcelona

Geetha, Natarajan (1995) Chemistry
B.S., Madurai Kamaraj University
M.S., Madurai Kamaraj University
Ph.D., Indian Institute of Technology

Gellman, Perri L. (2004) Mathematics
A.A., Mesa College
B.A., Loma Linda University
M.A., San Diego State University

Gerwig, Arthur R. (2006) Physics and Engineering
B.S., San Diego State University

Gideon, Wendy S. (2014) Biology
B.S., California Lutheran University
Bachelor of Education, Simon Fraser University
M.S., University of California, Davis

Gilardi, James L. (1996) Biology
B.S., San Diego State University
M.S., San Diego State University
M.B.A., San Diego State University

Gilkey, Michael J. (2010) Business Administration
B.S., Brigham Young University
M.A.C., Brigham Young University

Glass, Lily (1999) Art
B.F.A., Art Center College of Design

Glassman, Joel W. (2011) Business Administration
B.S., University of Illinois
M.S., Kansas State University

Gomez, Alexander (2019), Multicultural Studies
B.A., San Diego State University
M.A., San Diego State University

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

Green, Nicholas R. (2002) Computer Science and Information Systems
A.A., Coconico Country Community College
B.A., California State University, San Marcos

Grove, Kathleen A. (2005) Behavioral Sciences
B.A., California State University, Long Beach
M.A., University of California, San Diego
Ph.D., University of California, San Diego

Guerrero, Luis A. (2016) Mathematics
A.A., Southwestern College
B.A., University of California, San Diego
M.A., University of California, Santa Barbara

Guillen, Adriana (2019), World Languages
B.A., UC Santa Cruz
M.A., San Diego State University
Ph.D., UC Santa Barbara

Gushansky, Gene A. (2008) Biology
B.A., University of Northern Colorado
M.A., University of Northern Colorado

Harland, John R. (2011) Mathematics
B.A., University of California, San Diego
Ph.D., University of California, San Diego

Hernandez-Coria, Adelina (2003) Dental Assisting
B.A., The Autonomous University of Baja California

Hernandez, Jessica (2018) Nursing Education
B.S.N., East Carolina University
M.S.N., East Carolina University

Hernandez, Michael (2013) Art
B.F.A., Emporia State University
M.F.A., Alfred University

Hernandez, Sergio H. (2008) Trade and Industry
O.A.D., Arizona Automotive Institute
B.S., University of Phoenix

Hernandez, Timothy M. (1997) Counseling
B.A., University of California, Santa Cruz
M.A., San Diego State University

Herrera, Jennifer (2019), Economics, History and Political Science
B.A., California State University, San Marcos
M.A., California State University, San Marcos

Hiro, Erin M. (2007) Media Studies
B.S., California Polytechnic State University, San Luis Obispo
M.S., Northwestern University

Hishmeh, Richard E. (2006) English
B.A., University of California, Riverside
M.A., University of California, Riverside
Ph.D., University of California, Riverside

Hokett, Dewi D. (2000) Speech Communication/ Forensics/ASL
B.A., California Baptist University
M.A., California State University, Fullerton

Holthaus, Tamara (2017) Early Childhood Education Center
B.S., Excelsior College, Albany
M.A., Pacific Oaks College, Pasadena

Hooper, Wayne (2013) Public Safety Programs
A.A., Palomar College
B.S., California State University, Long Beach

Hosaka, Heather W. (2016) English as a Second Language
B.A., San Diego State University
M.A., Queen Mary University

Hoover, Leah (2019), Business Administration
B.A., Point Loma Nazarene University
M.S., Keller Graduate School of Management

Hudelson, Mark J. (1997) Art
B.A., University of California, Irvine
M.A., San Diego State University

Huskey, Karan K. (2001) Counseling
B.S., San Diego State University
M.Ed., University of San Diego

Hu, Yi-Cheng (2017) Early Childhood Education Center
B.A., George Mason University, Fairfax
M.A., Pacific Oaks College, Pasadena

Ikenushi, Masako (2011) World Languages
B.A., University of Southern California
M.A., University of Southern California
Ph.D., University of California, Irvine

Issaian , Adena (2019), Chemistry
B.S., University of California, Los Angeles
M.S., University of California, Irvine

Jacobo, Rodolfo Jr. (2010) Multicultural Studies
B.A., San Diego State University
M.A., San Diego State University
Ph.D., San Diego State University/Claremont Graduate University

Jahnel, William B. (2001) Economics, History & Political Science
B.A., Austin College
M.A., Rice University

Jain, Catherine M. (2000) Earth, Space, and Environmental Sciences
B.S., California Polytechnic State University, San Luis Obispo
M.A., San Diego State University

Japtok, Martin M. (2004) English
Ph.D., University of California, Davis

Jarvinen, Jason (2017) Cooperative Education
B.A., University of California, San Diego
M.A., University of San Diego

Jenkins, Jerry R. (2002) English
B.A., University of California, San Diego
M.A., University of California, San Diego
Ph.D., University of California, San Diego

Johnston, Tracy L. (2010) Mathematics
B.S., California Polytechnic State University, San Luis Obispo
M.A., University of California, San Diego

Jones, Robert N. (1997) Mathematics
A.A., Grossmont College
B.A., San Diego State University
M.A., San Diego State University

Jonestein, Sasha K. (2006) Art
B.F.A., University of Michigan
M.F.A., Massachusetts College of Art

Kahn, Jack (2013) Assistant Superintendent/ Vice President, Instruction
B.S., Arizona State University
M.S., San Jose State University
Ph.D., University of Buffalo

Kardel, William S. (2015) Earth, Space, and Environmental Sciences
B.S. Ed., Northern Arizona University
M.S., The University of Arizona

Kearny, Kevin P. (2013) English
B.A., Union College
M.A., University of California, Santa Barbara
M.A., University of California, Santa Barbara
Ph.D., University of California, Santa Barbara

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

Kim, Hwang Y. (2016) Art
B.F.A., San Diego State University
M.A., Queen Mary University of London
M.F.A., Queen Mary University of London

Klinger Scott (2019), Media Studies
B.A., University of California, Los Angeles
M.F.A., University of California, Irvine

Krause, Sara K. (2015) Biology
B.S., Cornell University
Ph.D., University of California, Davis

Kurokawa, Paul G. (2011) Performing Arts
B.A., California State University, Long Beach
M.F.A., University of California, Irvine

Lane, Mark R. (1997) Earth, Space, and Environmental Sciences
B.A., San Diego State University
M.S., San Diego State University

Larson, Gregory S. (2006) Mathematics
B.A., University of California, San Diego
M.S., California State University, San Marcos

Lasater, Lisette (2019), English
B.A., California State University, San Marcos
M.A., University of California, Riverside

Laughlin, Teresa L.C. (1995) Economics, History & Political Science
B.S., University of California, Berkeley
M.A., California State University, Fullerton

Lawson, Lawrence L. (2009) English as a Second Language
B.A., Sonoma State University
M.A., Monterey Institute of International Studies

Lechusza Aquallo, Alan (2009) American Indian Studies
B.M.A., California State University, Long Beach
M.F.A., University of California, Irvine
Ph.D., University of California, San Diego

Lee, Adrianne (2017) Director, Financial Aid, Veterans, and Scholarship Services
A.A., Southwestern Community College
B.A., Alliant International University
M.S., National University

Lee, Yuan-Lin (2019), Mathematics
B.A., University of California, Irvine
M.S., California State University, San Marcos

Lesyna, Kalyna K. (2001) Behavioral Sciences
B.A., San Diego State University
M.A., University of California, San Diego

Lienhart, Shannon G. (1991) Mathematics
B.S., San Diego State University
M.A., San Diego State University

Lindgren, Elise (2019) Biology
B.S., University of California, San Diego
M.S., University of California, San Diego

**Limer, Joseph P. (2013) Economics,
History & Political Science**
B.A., Fairmont State College
J.D., West Virginia University

Lindsay, Cory (2017) Biology
B.S., Wayne State College
Ph.D., University of Florida, Gainesville

Lineback, Monique (2017) Nursing Education
A.A., Palomar College
B.S.N., University of California, San Diego
M.S., University of San Diego
Ph.D., University of San Diego

Little, Betsi (2019), Behavioral Sciences
B.A., Indiana University
M.S., University of North Dakota
Ph.D., University of North Dakota

Lomeli-Hixon, Lorena T. (2011) Counseling
B.A., San Diego State University
M.S., San Diego State University

Lopez, Natalie M. (2016) Library
B.A., California State Polytechnic University, Pomona
M.L.S., San Jose State University

Lovelace, Sierra S. (2013) Counseling
A.A., Mira Costa College
B.B.A., National University
M.P.A., San Diego State University
M.A., San Diego State University

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

**Lucido, Joseph (2018) Design and
Manufacturing Technologies**
B.A., Woodbury University, Burbank
M.A., Woodbury University, Burbank

Lundell, Michael J. (2016) English
Ph.D., University of California, San Diego

**Lutz, Dennis C. (1990) Design and
Manufacturing Technologies**
A.A., Palomar College
A.B., San Diego State University
M.A., San Diego State University

**Ly, Pearl (2018) Dean, Instructional,
Social and Behavioral Sciences**
B.A., University of San Diego
M.L.I, University of California, Los Angeles
M.A., University of California, Los Angeles
Ed.D., University of California, San Diego

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

Magnuson, Kendyl (2012) Director, Enrollment Services
B.A., Winona State University
M.S., University of Wisconsin, La Crosse
Ed.D., University of the Pacific

**Mancao, Ronald C. (2001) Health, Kinesiology and
Recreational Management / Athletics**
A.B., San Diego State University
M.A., San Diego State University

Manneh, Beatrice H. (2015) World Languages
B.A., Ludwig-Maximilian University of Munich
B.A., Ludwig-Maximilian University of Munich (NACES)
M.A., Philipps-Universitat-Marburg (NACES)

**Marjanovic, Kristen M (2014) Economics,
History & Political Science**
B.A., San Diego State University
M.A., San Diego State University

**Marshall, Leigh (2019) Health, Kinesiology,
and Recreation Management**
A.A., Orange Coast College
B.S., California State University, Fullerton
M.A., California State University, Long Beach

Martin-Klement, L. Jackie (1997) Business Administration
B.A., Bowling Green State University
M.A., Bowling Green State University

Martin, Timothy (2018) Library
A.S., The New England Institute of Art, Boston
B.A., Cambridge College, Cambridge
M.L.I.S., University of Hawaii

Martinez, Martha (1996) Mathematics
A.A., Palomar College
B.S., California State University, San Marcos
M.S., California State University, San Marcos

Mattson, Rebecca (2018) Nursing Education
B.S.N., Franciscan University, Steubenville
M.S., California State University, Dominguez Hills

Maunu, Leanne M. (2002) English
B.A., University of California, San Diego
M.A., Indiana University
Ph.D., Indiana University

Mayo, Shelbi R. (2015) Mathematics
B.A., University of California, Santa Barbara
M.Ed., University of California, Santa Barbara
M.S., San Diego State University

McAdams, James E. (1992) Health, Kinesiology and Recreational Management / Athletics
B.S., California State University, Fullerton

McCann, Sylvie (2007) Early Childhood Education Center
A.A., Palomar College
B.S., University of Phoenix
Child Development Master Teacher Permit

McDonald, Russ C. (2005) Financial Aid, Veterans' and Scholarship Services
B.A., California State University, Northridge
M.Ed., Azusa Pacific University

McKinney, Christina M. (2016) Extended Opportunity Programs & Services
B.A., University of California, Berkeley
M.A., San Diego State University

McLellan, Kevin F. (1990) Speech Communication/ Forensics/ASL
American Sign Language Credential

McMurria, John (2019) Media Studies
B.S., University of Colorado Boulder
M.A., The City University of New York, Graduate Center
Ph.D., New York University

Mead, Patriceann J. (1997) Performing Arts
B.S., State University of New York, Brockport
M.A., State University of New York, Brockport
M.F.A, State University of New York, Brockport

Medel, Thomas (2018) Director, Education Center
B.S., California State University, Fresno
M.A., California State University, Northridge

Meehan, Adam J. (2015) English
B.A., University of California, Berkeley
M.A., San Diego State University
Ph.D., University of Arizona

Mellos, Vickie (2017) English as a Second Language
B.A., University of California, San Diego
M.A., San Diego State University

Mendoza, Mary E. (2016) Speech Communications/ Forensics/American Sign Language
A.A., San Diego Community College
M.A., University of California, San Diego
Ed.D., University of California, San Diego

Meske, David (2018) Computer Science and Information Technology
B.S., California State University, Bakersfield
M.P.A, California State University, Bakersfield
Ph.D., University of La Verne

Metzger, Wendy R. (1988) Mathematics
A.B., San Diego State University
M.A., San Diego State University
M.S., Rensselaer, New York

Meyers, Lori E. (2008) Disability Resource Center/ Extended Opportunity Programs & Services
A.B., San Diego State University
M.S., San Diego State University

Mifflin, Karen L. (2001) Mathematics
B.S., University of California, Riverside
M.S., University of California, Riverside

Miller, David (2017) Public Safety Programs
A.S., San Diego Community College District
B.S., California State University, Long Beach

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

Mobilia, Anne-Marie (2001) Behavioral Sciences
B.A., University of California, Irvine
M.A., San Diego State University

Moriarty, Shauna (2017) Director, Disability Resources
B.A., Marquette University, Milwaukee
M.A., Duquesne University, Pittsburg
Ph.D., University of the Pacific, Stockton

Morris, Katie K. (2011) Counseling Services
B.A., San Diego State University
M.S., San Diego State University

Morris, Sari (2014) Early Childhood Education Center
A.A., Palomar College, San Marcos

Morrissette, Roger N. (2001) Behavioral Sciences
B.A., Plymouth State University
M.A., San Jose State University
Ph.D., University of California, Los Angeles

Morrow, Linda D. (2005) Library
B.S., Wayne State University
M.S., Wayne State University
M.A., Michigan State University

Moyano, Larry (2017) Counseling
A.A., Southwestern College
A.S., Southwestern College
B.A., California State University, San Marcos
M.A., San Diego State University

Mudgett, Benjamin (2015), Counseling
B.S., University of La Verne
M.A., University of Redlands

Mufson, Michael A. (1995) Performing Arts
M.F.A., University of California, Irvine

Mumford, Michael V. (1990) Mathematics
B.A., Humboldt State University
M.S., Colorado State University

Navarro, Adam (2019)
Speech Communication/Forensics/ASL
B.A., California State University, Fullerton
M.F.A., California State University, Fullerton

Nelson, Scott E. (2016) World Languages
B.A., California State University, Chico
M.A., California State University, Chico
M.A., The University of North Carolina at Chapel Hill
Ph.D., The University of North Carolina at Chapel Hill

Nelson, Wendy L. (2000) Media Studies
B.S., Ohio University
M.S., San Diego State University

Newman, Jessica (2019)
Design & Manufacturing Technologies
A.A.S., Fashion Institute of Technology
B.F.A., Fashion Institute of Technology
M.F.A., Academy of Art University

Nguyen, Duy (2019)
Computer Science/Information Technology
B.S., Harvey Mudd College
M.S., University of California, Los Angeles
Ph.D., University of California, Los Angeles

Nguyen, Trong D. (2006) Extended Opportunity
Programs and Services
B.A., University of San Diego
M.Ed., University of San Diego

Nguyen, Quan H. (2019) Physics and Engineering
B.S., Embry-Riddle Aeronautical University
M.S., Santa Clara University

Nunez, Rosa Elvia (1990) Counseling
A.B., San Diego State University
M.S., San Diego State University

Ober, Ingram S. (2004) Art
B.A., Eckerd College
M.F.A., Claremont Graduate University

O'Brien, Matthew E. (2016) Behavioral Sciences
B.A., California State University San Marcos
M.A., California State University San Marcos
M.A., Claremont Graduate University
Ph.D., Claremont Graduate University

O'Brien, Patrick J. (2001) Counseling
B.S., University of Texas, Austin
M.A., San Diego State University

O'Callaghan, Dana M (2014) Counseling
B.A., University of California, Riverside
M.A., Pepperdine University
Ph.D., University of North Texas

O'Doherty, Fergal C. (1997) English
B.A., State University of New York, Stony Brook
Ph.D., City University of New York

O'Loughlin, John (2019)
Speech Communication/Forensics/ASL
B.S., Gallaudet University
M.A., University of California, San Diego

Page, Andrew (2018) Emergency Medical Education
A.A., Palomar College, San Marcos

Pain, Elizabeth (2019), Behavioral Science
B.A., University of California, Los Angeles
M.A., California State University, Northridge

Panish, Jon (2000) English
B.A., University of California, Los Angeles
M.A., University of Iowa
Ph.D., University of California, Irvine

Paranthaman, Lakshmi (2018) Counseling
B.B.A., College of William and Mary
M.B.A., University of California, Los Angeles
J.D., University of Virginia

Parker, Tina-Marie (2019), English as a Second Language
B.A., University of Vermont
M.Ed., University of San Diego

Patrick, Julie (2019), Nursing Education
A.A., Palomar College
B.S., Grand Canyon University
M.S., Grand Canyon University

Payn, Lillian S. (1997) Graphic Communications
B.A., University of Arizona
M.A., University of Arizona
M.Ed., Utah State University
Ph.D., Capella University

Pearson, Elizabeth A. (1997) Biology
A.S., Victor Valley College
B.A., California State University, Fullerton
M.A., California State University, Fullerton

Pedroza, Jose Carlos C. (2005) World Languages
B.A., San Diego State University
M.A., San Diego State University

Perry, Stephen R. (2001) Computer Science
and Information Systems
B.A., Illinois Institute of Technology
M.A., University of Phoenix

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

Pope, Loren (2015) Nursing Education
B.S., California State University Fullerton
M.S., Liberty University

Powers, Kevin M. (2016) Trade and Industry
B.A., California State University, San Bernardino

Raymundo, Mark Anthony (2019), Chemistry
B.S., University of California, Riverside
M.S., University of California, Riverside

Richison, Scott (2019), Media Studies
B.A., University of California, San Diego
2+ Years of Experience

**Ritt, Travis W. (2011) Economics,
History & Political Science**
B.A., University of Miami
M.S., University of Miami
M.A., Florida State University
Ph.D., Florida State University

Rivera, Heriberto (2015) Chemistry
B.S., University of California, San Diego
Ph.D., The University of Texas at Austin

**Rivera-Lacey, Star (2019), Assistant Superintendent/
Vice President, Student Services**
B.A., California State University, San Marcos
M.A., San Diego State University
Ph.D., San Diego State University

Robelin, Rene (2017) Early Childhood Education Center
B.A., California State University, San Marcos

Robinson, Julia E. (2009) Nursing Education
A.A., Palomar Community College, San Marcos
B.S., California State University, Dominguez Hills
M.S., California State University, Dominguez Hills
DNP, University of San Diego

**Roe, Nichol (2017) Associate Dean,
Workforce Development and Extended Studies**
A.A., MiraCosta College, Oceanside
B.A., California State University, San Marcos
M.A., California State University, San Marcos

Rolens, Clare E. (2015) English
B.A., University of California, Santa Barbara
M.A., University of California, San Diego
Ph.D., University of California, San Diego

Rollins, Wade E. (1999) Graphic Communications
B.A., California State University, San Marcos
M.A., San Diego State University

Romain, Lisa A. (1997) Counseling
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

Rose, Candace (2014) Media Studies
B.A., Prescott College
M.H., Tiffin University

Rose, Fredric E. (2004) Behavioral Sciences
M.A., University of Montana
B.A., San Diego State University
Ph.D., University of Montana

Ross, Maryellen (2011) Nursing Education
B.S., York College of Pennsylvania
M.S., Walden University

Rowland, Michelle (2019), Nursing Education
A.S., Riverside Community College
B.S., Grand Canyon University
M.S., Grand Canyon University

Rudy, Denise E. (2003) Dental Assisting
A.A., MiraCosta College

Russell, John K. (2016) Performing Arts
B.M., Western Michigan University
M.A., Columbia University
D.M.A., University of Southern California

Rypien, Krystal L. (2013) Biology
B.S., University of Alberta
Ph.D., Cornell University

Sadat Ahadi, Hossna (2018) Counseling
A.A. San Diego Miramar College
B.A. University of California, San Diego
B.A. University of California, San Diego
M.A. San Diego State University
Ed.D. San Diego State University

**Salter, Steven (2018) Director,
Extended Opportunity Programs & Services**
B.S., Millersville University, Millersville
M.A., Lehigh University, Bethlehem, PA

Sanchez, Gabriel A. (2006) Counseling
A.A., Southwestern College
B.A., San Diego State University
M.A., San Diego State University
Ph.D., San Diego State University

Sanders, Gina L. (2015) Mathematics
A.A., Palomar College
B.S., California State University San Marcos
M.S., California State University San Marcos

San Juan, Seth A. (2013) American Indian Studies
B.A., University of California, San Diego
M.A, The University of Arizona

Schroer, Netta (2013) Behavioral Sciences
B.A., Scripps College
B.A., Scripps College
M.A., Claremont Graduate University
Ph.D. Claremont Graduate University

Sebring, Suzanne (2012) Director, Occupational and Noncredit Programs
A.A., Mount San Jacinto College, Menifee
B.A., University of Illinois, Springfield
M.A., Ohio University, Athens

Seiler, Karl E. (2004) Health, Kinesiology and Recreational Management /Athletics
A.A., MiraCosta College
B.S., San Diego State University
M.Ed., Azusa Pacific University

Sheahan, Kathleen M. (2001) World Languages
B.A., California State University, San Marcos
M.A., San Diego State University
Ed.D., San Diego State University

Shiba, Jacob (2019), Trade & Industry
B.S., University of California, Riverside
M.S., University of California, Riverside

Siminski, Nicole (2019), English as a Second Language
A.A., Sierra College
A.S., Sierra College
B.A., California Polytechnic University
M.A., San Diego State University

Sinnott, Christopher J. (2010) Performing Arts
B.A., University of Notre Dame
M.F.A., Indiana University

Smiley, Justin (2018) Dean, Instructional, Arts, Media and Business Administration
B.A., University of California, Los Angeles
M.F.A., Rutgers University at New Brunswick

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, Devon Y. (2013) Behavioral Sciences
B.A., Emory University
M.A., University of California, San Diego
Ph.D., University of California, San Diego

Smith, Jonathan P. (2008) Economics, History & Political Science
B.A., Linfield College
M.A., University of California, San Diego

Smith, Julie (2019) Nursing Education
A.A., Palomar College, San Marcos
B.S., Grand Canyon University, Phoenix
M.S., Grand Canyon University, Phoenix

Smith, Melissa B. (1997) Speech Communication/ Forensics/ASL
A.A., Grossmont College
B.A., San Diego State University
M.A., University of California, San Diego

Snow, Susan R. (1996) Mathematics
B.S., State University of New York at Plattsburgh

Sosa, Gary S. (2004) English as a Second Language
B.A., California State University, Long Beach
M.A., Monterey Institute of International Studies

Sperling, Lindsay (2018) Chemistry
B.S., State University of New York, Geneseo
Ph.D., University of Illinois, Urbana-Champaign

Streagle, Jennifer (2017) Early Childhood Education Center
A.A., Palomar College, San Marcos

Sprague, Ed (2016) Public Safety
A.A., Palomar College
B.A., San Diego State University
M.P.A., San Diego State University

Squires, Annette D. (2002) Mathematics
B.S., California State University, Long Beach
M.A., California State University, Long Beach

Studinka, Diane C. (1995) Child Development
B.A., Humboldt State University
M.S., National University

Talone, Anita R. (2011) Design and Manufacturing Technologies
B.A., University of California, San Diego
M.S., National University

Tavakkoly , Aundrea (2019), Physics & Engineering
B.A., University of Hawai'i Manoa (art)
B.S., University California Santa Barbara
M.S., University California Santa Barbara

Taylor, Cord A. (2010) Health, Kinesiology and Recreational Management /Athletics
B.S., San Francisco State University
M.Ed., Azusa Pacific University

Templo-Capule, Marie (2018) Library
B.A., De La Salle University, Manila
J.D., Western Michigan University, Michigan
M.A., New York School of Law, New York
M.A., Wayne State University, Detroit

Thompson, Craig B. (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

Tian, Yan (2004) Mathematics
B.A., Beijing Teacher's University
M.A., Indiana University

Titus, Sherry M. (1995) Director, Student Life & Leadership
B.S., Utah State University
M.A., National University
M.Ed., Utah State University

Torgison, Cynthia M. (2000) Mathematics
B.A., McPherson College
M.A., California State University, Dominguez Hills
M.S., San Diego State University

Towfiq, Fariheh (1990) Mathematics
B.S., University of California, Irvine
M.A., California State University, Fullerton

Trujillo, Stacey (2016) English
B.A., San Diego State University
M.A., University of California, San Diego
Ph.D., University of California, San Diego

Valentine, Barry (2019), HVAC Trade and Industry
B.S., University of Phoenix
California State Contractors License (HVAC)
2+ Years of Experience

Van Dyke, Leigh Ann (2013) Disability Resource Center
B.A., San Diego State University
M.S. California State University, Fresno

Van Houten, Juliane P. (2009) Nursing Education
B.S., University of Phoenix
M.S., San Diego State University

Velazquez, Kimberly M. (2007) Biology
B.S., San Diego State University
M.S., San Diego State University

Ventimiglia, Thomas V. (1999) Counseling
A.A., San Diego Mesa College
B.A., University of San Diego
M.A., San Diego State University

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B.S., Northern Arizona University
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M.A., Pacific Oaks College, Pasadena

Wolters, Ashley (2018) Trade and Industry
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B.S., San Diego State University
M.A., California State University, San Bernardino

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Ph.D., University of California, San Diego

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B.A., University of Hawaii, Manoa
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Ph.D., University of California, Los Angeles

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Ph.D., University of California, Riverside

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Ph.D., Saint Louis University

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M.A., San Diego State University

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B.A., Nankai University, Tianjin, Chin
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GLOSSARY & INDEX   <u>11</u>

Section 11
Glossary and Index

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 or Records Office.

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 or Admissions Office.

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 and online at http://www.assist.org.

ASSIST: The official Internet site (www.assist.org) that contains all articulation agreements between California Community Colleges, the California State University, and the University of California.

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.

Associate in Arts Degree for Transfer (AA-T) Degree: Intended for students who plan to complete a Bachelor's Degree in a similar major at a CSU campus. Students completing this degree are guaranteed admission to the CSU system, but not to a particular campus or major. See a counselor for specific information regarding this major.

Associate in Science (AS) 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.

Associate in Science Degree for Transfer (AS-T) Degree: Intended for students who plan to complete a Bachelor's Degree in a similar major at a CSU campus. Students completing this degree are guaranteed admission to the CSU system, but not to a particular campus or major. See a counselor for specific information regarding this major.

Auditing: To take a course without being graded or receiving credit, available to students by petition only.

Career Technical Education (CTE) Transitions: Formerly known as **Tech Prep**, CTE Transitions is a technical and academic program that enables high school students to prepare for a career and college at the same time.

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 enrollment information, add and drop deadlines, testing dates and times, and other general information. Class schedule may also be found on our website at http://www2.palomar.edu/pages/schedule/.

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 beyond the drop deadline.

Continuous Enrollment: For enrollment purposes, it is defined as attendance at Palomar College beyond the drop period of each primary term, where letter grades or W's appear on the transcript. For graduation purposes, it is defined as attendance in one semester or two quarters (excluding Summer Session) within a calendar year (January through December) in the CSU, UC, or California CC Systems following initial enrollment at Palomar.

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.

General Education (GE) Requirements: Also known as breadth or core requirements, these patterns of courses are designed to expose students to broad areas of knowledge.

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 – 8 1/2 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.

Noncredit Certificate of Completion (NC): Designed to lead to improved employability or job opportunities. Awarded upon completion of specified course work.

Noncredit 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.

Pass/No Pass (P/NP) Grading: Pass/No Pass units are not counted in the GPA. A Pass is earned for coursework equal to a "C" grade or better. A No Pass is earned for coursework equal to a "D" or "F" grade. Pass/No Pass units are used in calculating Progress Probation and Dismissal.

Probation: A warning status that scholastic standards are not being met.

Semester: A 16-week period of class work.

TAG (Transfer Admission Guarantee): Palomar College has TAG programs with six UC campuses. All of these agreements guarantee admission into the major at those universities.

Three-Quarter Time: A study load of 9 – 11 1/2 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 20% 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.

A

B

C

T

V

W