

## Oceanography (OCN)

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

### COURSE OFFERINGS

**OCN 100 Oceanography Lecture (3)**  
3 hours lecture

**Note:** Not open to students with prior credit in OCN 101  
**Transfer acceptability:** CSU; UC – OCN 100/100L and 101 combined: maximum credit, 4 units

An introductory course designed to acquaint the student with general oceanography. Topics treated include the history and scope of oceanography, properties of sea water; ocean currents, ocean waves and tides, submarine morphology and geology, marine sediments, life in the sea, and the significance of the oceans to man.

**OCN 100L Oceanography Laboratory (1)**  
3 hours laboratory

**Prerequisite:** Completion of, or concurrent enrollment in, OCN 100 or OCN 115

**Note:** Not open to students with prior credit in OCN 101  
**Transfer acceptability:** CSU; UC – OCN 100/100L and 101 combined: maximum credit, 4 units

Laboratory and field investigations of marine environments including geologic, physical, chemical, and biological aspects of the ocean and coastal area. The course emphasizes changing physical factors and man's activities as they affect the oceans.

**OCN 101 Oceanography (4)**  
3 hours lecture-3 hours laboratory

**Note:** Not open to students with prior credit in OCN 100 or 100L  
**Transfer acceptability:** CSU; UC – OCN 100/100L and 101 combined: maximum credit, 4 units

An introductory course in general oceanography including laboratory and field investigations of marine environments. Topics include: the history and scope of oceanography, properties of sea water, ocean currents, ocean waves and tides, submarine morphology and geology, life in the sea, and the significance of the oceans to man. Laboratory portion includes investigation of marine environments including geologic, chemical, physical, and biological aspects of the ocean and coastal area.

**OCN 115 Coastal Oceanography (3)**  
3 hours lecture

**Transfer acceptability:** CSU; UC  
This course is designed for those interested in learning more about the coastal zone and its relationship with human activities. Students will examine a variety of coastal zones including sandy coastlines, rocky coastlines, coastal wetlands, coral reefs, and glaciated coastlines. Analysis of the coastal types will include investigation of case studies from around the world with a focus on the West Coast U.S. and California. Case studies will include effects of natural coastal processes as well as effects produced by human intervention. Several field trips will be offered. Students are expected to participate in a one-day field trip.

**OCN 195 Regional Field Studies in Oceanography (1,2,3)**  
2, 4, or 6 hours lecture/laboratory

**Note:** May be taken 4 times  
**Transfer acceptability:** CSU  
Extended field studies that examine the oceanography of selected regions. Emphasis is upon field observation, interpretation, and analysis of varying oceanographic phenomena including coastal processes and landforms, natural resources, marine ecosystems, coastal currents and weather patterns, tectonics and sea level history, and human impacts in the coastal environment.

**OCN 197 Oceanography Topics (.5-4)**

Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture, laboratory, or lecture/laboratory may be scheduled by the department. Refer to Class Schedule.  
**Note:** May be taken 4 times

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

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

**OCN 295 Directed Study in Oceanography (1,2,3)**

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

**Prerequisite:** OCN 100 or 101

**Note:** May be taken 4 times for a maximum of 6 units

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

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

## Office Information Systems (OIS)

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

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

### PROGRAMS OF STUDY

#### Administrative Assistant

This program is designed to prepare the student for an administrative support office position in business and industry.

A Certificate of Achievement and/or an AA degree will be awarded to students who successfully complete the requirements listed below.

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

Program Requirements	Units
BUS 105 Bookkeeping Fundamentals	3
BUS 110 Business Mathematics	3
BUS 125 Business English	3
BUS 175 Excel Basic	1
BUS 180 Access for Business	1
BUS 185 PowerPoint for Business	1
BUS 186/ R CSIS 130 Microsoft Publisher	1
BUS 190 Internet for Business	1
OIS 103 Advanced Keyboarding	1
OIS 115 Filing and Records Management	1
OIS 120 Intro to Office Information Systems	3
OIS 136.1 Word Basic	1
OIS 136.2 Word Intermediate	1
OIS 136.3 Word Advanced	1
OIS 205 Office Procedures	3
OIS 230 Secretarial Machine Transcription	1
CE 100 Cooperative Education	1,2,3,4
Demonstrate the ability to type 50 net words per minute for five minutes with 5 errors or less	0

**TOTAL UNITS 27 - 30**

Recommended Electives: BUS 187, BUS 188, 205

Credit for Certified Professional Secretary (CPS) Certification: Individuals who hold a certificate as a Certified Professional Secretary (CPS) or Certified Administrative Professional (CAP) may apply to the Business Education/Office Information Systems Department for units toward an Administrative Assistant Associate of Arts Degree. The units granted, with a grade of "CR", will be posted to the student's transcript upon completion of the remaining A.A. degree requirements. Students must provide evidence of successful completion of the CPS or CAP certification.

## Data Entry Clerk

Provides a program to prepare the student for an entry-level data entry position.

A Certificate of Proficiency will be awarded to students who successfully complete the requirements listed below.

### CERTIFICATE OF PROFICIENCY

Program Requirements		Units
OIS 101	Beginning Keyboarding	3
OIS 108	Data Entry Skills I	1
OIS 109	Data Entry Skills II	1
OIS 115	Filing and Records Management	1
OIS 136.1	Word Basic	1
OIS 136.2	Word Intermediate	1
Demonstrate the ability to key from average copy at a minimum speed of 10,000 strokes per hour with an error rate not to exceed 0.5%		0
<b>TOTAL UNITS</b>		<b>8</b>

International Administrative Assistant

This program is designed to prepare the student for entry-level office work in a bilingual business environment.

A Certificate of Achievement and/or an A.A. degree will be awarded to students who successfully complete the requirements listed below.

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

Program Requirements		Units
IBUS 100	Intro to Int'l Business and Management	3
IBUS 105	International Marketing	3
IBUS 110	Cultural Environment/Int'l Business	3
BUS 125	Business English	3
BUS 175	Excel Basic	1
BUS 180	Access for Business	1
BUS 185	PowerPoint for Business	1
BUS 190	Internet for Business	1
OIS 102	Intermediate Keyboarding	3
OIS 115	Filing and Records Management	1
OIS 120	Intro to Office Information Systems	3
OIS 136.1	Word Basic	1
OIS 136.2	Word Intermediate	1
OIS 205	Office Procedures	3
CE 100	Cooperative Education	1,2,3,4
Demonstrate the ability to type 50 net words per minute for five minutes with 5 errors or less		0
<b>TOTAL UNITS</b>		<b>29 - 32</b>

Recommended Electives: BUS 186/R CSIS 130, BUS 188, 205

## Legal Secretary

Provides a program to prepare the student for entry-level legal office work.

A Certificate of Achievement and/or an A.A. degree will be awarded to students who successfully complete the requirements listed below.

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

Program Requirements		Units
BUS 125	Business English	3
BUS 205	Business Writing	3

OIS 102	Intermediate Keyboarding	3
OIS 103	Advanced Keyboarding	1
OIS 115	Filing and Records Management	1
OIS 120	Intro to Office Information Systems	3
OIS 136.1	Word Basic	1
OIS 136.2	Word Intermediate	1
OIS 210	Law Office Procedures I	3
OIS 232.1	Legal Machine Transcription Basic	1
OIS 232.2	Legal Machine Transcription Advanced	1
PLS/LS 121	Introduction to Law	3
CE 100	Cooperative Education	1-4
Demonstrate the ability to type 60 net words per minute for five minutes with 5 errors or less		0

**TOTAL UNITS 25 - 28**

Recommended Electives: BUS 105, 110, 115, 175, 180, 185; LS/PLS 245, 246

Credit for California Certified Legal Secretary (CCLS) Certification: Individuals who hold a certificate as a California Certified Legal Secretary (CCLS) may apply to the Business Education Department for units toward a Legal Secretary A.A. Degree. The units granted, with a grade of "CR," will be posted to the student's transcript upon completion of the remaining Associate of Art's degree. Eligibility for the units will be determined by the Office Information Systems staff, extension 2498. Students must provide evidence of successful completion of the California Certified Legal Secretary.

## Medical Office Specialist

Provides specific skills for an entry level position in a medical office or clinic.

A Certificate of Achievement and/or an A.A. degree will be awarded to students who successfully complete the requirement listed below.

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

Program Requirements		Units
MA 55	Medical Terminology and Anatomy	3
MA 56	Medical Terminology and Anatomy	3
MA 60	Medical Insurance	3
BUS 110	Business Mathematics	3
BUS 125	Business English	3
OIS 102	Intermediate Keyboarding	3
OIS 103	Advanced Keyboarding	1
OIS 115	Filing and Records Management	1
OIS 120	Intro to Office Information Systems	3
OIS 136.1	Word Basic	1
OIS 136.2	Word Intermediate	1
OIS 205	Office Procedures	3
OIS 231.1	Medical Machine Transcription I	1
OIS 231.2	Medical Machine Transcription II	1
CE 100	Cooperative Education	1,2,3,4
Demonstrate the ability to type 45 net words per minute for five minutes with 5 errors or less		0

**TOTAL UNITS 31 - 34**

Recommended Electives: BUS 105, 175, 180, 185

## Medical Transcriptionist

Provides specific skills for preparing permanent patient records by transcribing dictated medical reports.

A Certificate of Achievement and/or an A.A. degree will be awarded to students who successfully complete the requirements listed below.

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

<b>Program Requirements</b>		<b>Units</b>
MA 55	Medical Terminology and Anatomy	3
MA 56	Medical Terminology and Anatomy	3
BUS 125	Business English	3
OIS 102	Intermediate Keyboarding	3
OIS 103	Advanced Keyboarding	1
OIS 120	Intro to Office Information Systems	3
OIS 136.1	Word Basic	1
OIS 136.2	Word Intermediate	1
OIS 220	Medical Transcription Procedures	3
OIS 231.1	Medical Machine Transcription I	1
OIS 231.2	Medical Machine Transcription II	1
OIS 231.3	Medical Machine Transcription III	1
OIS 231.4	Medical Machine Transcription IV	1
OIS 231.5	Medical Machine Transcription V	1
OIS 231.6	Medical Machine Transcription VI	1
CE 100	Cooperative Education	1,2,3,4
	Demonstrate the ability to type at least 50 net words per minute for five minutes with 5 errors or less	0
<b>TOTAL UNITS</b>		<b>28 – 31</b>

Recommended Electives: BUS 175, 180, 185

**Office Assistant**

Provides a program to prepare the student for an entry-level office assistant position.

A Certificate of Achievement will be awarded to students who successfully complete the requirements listed below.

**CERTIFICATE OF PROFICIENCY**

<b>Program Requirements</b>		<b>Units</b>
BUS 125	Business English	3
BUS 175	Excel Basic	1
BUS 190	Internet for Business	1
OIS 102	Intermediate Keyboarding	3
OIS 115	Filing and Records Management	1
OIS 120	Intro to Office Information Systems	3
OIS 136.1	Word Basic	1
OIS 136.2	Word Intermediate	1
OIS 205	Office Procedures	3
	Demonstrate the ability to type at least 45 net words per minute for five minutes	0
<b>TOTAL UNITS</b>		<b>17</b>

**Receptionist**

This program is designed to prepare the student for an entry-level receptionist position.

A Certificate of Proficiency will be awarded to students who successfully complete the requirements listed below.

**CERTIFICATE OF PROFICIENCY**

<b>Program Requirements</b>		<b>Units</b>
BUS 175	Excel Basic	1
BUS 190	Internet for Business	1
OIS 102	Intermediate Keyboarding	3
OIS 115	Filing and Records Management	1
OIS 120	Intro to Office Information Systems	3
OIS 136.1	Word Basic	1

OIS 136.2	Word Intermediate	1
OIS 205	Office Procedures	3
	Demonstrate the ability to type at least 45 net words per minute for five minutes with 5 errors or less	0
<b>TOTAL UNITS</b>		<b>14</b>

**Virtual Assistant**

Prepares students to develop a business as a Virtual Assistant, defined as an independent entrepreneur providing administrative, creative, and/or technical services to clients in a virtual environment.

In order to earn this certificate, students must achieve a minimum grade of 'C' in each of the certificate program courses. It is assumed that students possess strong written and oral communication skills, advanced keyboarding skills, and basic computer knowledge.

**CERTIFICATE OF PROFICIENCY**

<b>Program Requirements</b>		<b>Units</b>
BMGT 105	Small Business Management	3
BUS 138	Business Ethics	2
BUS 155	Marketing	3
BUS 171	Word for Business – Advanced	1
BUS 175	Excel Basic	1
BUS 180	Access for Business	1
BUS 185	PowerPoint for Business	1
BUS 186/ R CSIS 130	Publisher for Business	1
BUS 190	Internet for Business	1
OIS 125	Creating the Virtual Office	3
	Demonstrate the ability to type a minimum of 50 net words per minute for five minutes with five errors or less	0
<b>TOTAL UNITS</b>		<b>17</b>

Recommended Electives: BMGT 130; BUS 105, 115, 142, 150, 176, 177, 187; OIS 205

Courses numbered under 100 are not intended for transfer credit.

**COURSE OFFERINGS**

**OIS 50 CAP Review I (3)**  
3 hours lecture

**Note:** Offered in the fall semester only  
Designed to help prepare students for the four-part Certified Administrative Professional (CAP) Exam with emphasis in the areas of economics, accounting, and office administration/communication. Students should either have several years of working office experience or have completed an administrative assistant certificate program.

**OIS 51 CAP Review II (3)**  
3 hours lecture

**Note:** Offered in the spring semester only  
Designed to help prepare students for the four-part Certified Administrative Professional (CAP) Exam with emphasis in the areas of office technology, business law, management, and organizational planning. Students should either have several years of working office experience or have completed an administrative assistant certificate program.

**OIS 101 Beginning Keyboarding (3)**  
6 hours lecture/laboratory

**Note:** May be open entry/open exit  
**Transfer acceptability:** CSU  
A beginning course in keyboarding on the computer. Class includes learning to

keyboard alphabetic, numeric, and symbol keys by touch; developing speed and accuracy in straight copy writing; and keyboarding business documents such as letters, reports, memos, and simple tables.

**OIS 102 Intermediate Keyboarding (3)**  
6 hours lecture/laboratory

**Recommended preparation:** A minimum grade of 'C' in OIS 101 or a keyboarding speed of 30 net words per minute

**Note:** May be open entry/open exit

**Transfer acceptability:** CSU

The development of speed and accuracy in keyboarding with emphasis on production of business letters and other business documents and forms.

**OIS 103 Advanced Keyboarding (1)**

Students arrange 32 hours lecture/laboratory with instructor for self paced completion of course.

**Recommended preparation:** A minimum grade of 'C' in OIS 102 or a keyboarding speed of 45 net words per minute

**Note:** May be open entry/open exit

**Transfer acceptability:** CSU

Technique building, special speed building, and control building practices designed to develop and improve straight-copy performance.

**OIS 108 Data Entry Skills I (1)**

Course requires 32 hours lecture/laboratory.

**Recommended preparation:** A minimum grade of 'C' in OIS 101 or a keyboarding speed of 30 net words a minute

**Note:** May be open entry/open exit

Development of 10 key touch on the computer numeric keypad. Development and measurement of speed and accuracy in executing keyboard functions applied to a variety of data entry formats.

**OIS 109 Data Entry Skills II (1)**

32 hours lecture/laboratory

**Recommended preparation:** A minimum grade of 'C' in OIS 108

**Note:** May be open entry/open exit

Continued speed and accuracy development of 10-key touch on the computer numeric keypad, measurement of speed and accuracy in executing keyboard functions, and development of logical thinking and decision-making skills applied to a variety of forms.

**OIS 115 Filing and Records Management (1)**

Students arrange 32 hours lecture/laboratory with instructor for self paced completion of course.

**Note:** May be open entry/open exit

**Transfer acceptability:** CSU

Training in principles of filing and records management. Study and practice in filing by the alphabetic, numeric, geographic, and subject methods.

**OIS 120 Introduction to Office Information Systems (3)**

3 hours lecture

**Note:** Offered in the fall semester, day only; spring semester, night only

**Transfer acceptability:** CSU

How automation has changed and restructured the modern office and the specific role technology is playing in that change. Topics covered will include computer fundamentals, key software applications, electronic communications, creation of basic web pages, networking, distance learning, and careers. At the conclusion of this course, students will be prepared to take the IC3 certification.

**OIS 125 Creating the Virtual Office (3)**

3 hours lecture

An overview course for Virtual Assistants who provide administrative, creative, and/or technical services to clients in a virtual environment. Topics will include naming, organizing, and managing your virtual business; financial planning; time management; evaluating, buying and using technology; domain registration; marketing and promoting the virtual business; how and where to find clients; and business ethics.

**OIS 136.1 Word Basic (1)**

**Recommended preparation:** A minimum grade of 'C' in OIS 102 and 120

**Note:** Requires 32 hours lecture/laboratory. May be open entry/open exit. May be taken 4 times.

**Transfer acceptability:** CSU

Hands-on application with Microsoft Word. Students will create, save, close, open, edit, and print a variety of business documents utilizing the following software features: finding and replacing text; moving and copying text; spell, thesaurus, grammar, and auto text; character, paragraph, page, and document formatting; envelopes; tables; columns; headers/footers; smart tags; basic desktop publishing; and borders and special characters. The Class Schedule will designate software version covered.

**OIS 136.2 Word Intermediate (1)**

**Recommended preparation:** A minimum grade of 'C' in OIS 136.1

**Note:** Requires 32 hours lecture/laboratory. May be open entry/open exit. May be taken 4 times.

**Transfer acceptability:** CSU

Refinement of the basic skills learned in OIS 136.1 and practice with the more sophisticated features of Word on multi-page documents including advanced document formatting, merge and labels; hyperlinks; styles and templates; outlines; footnotes and endnotes; comparing and merging documents; linking and embedding objects; charts; Microsoft Office integration; and basic web page design. In addition, more advanced printing and file management techniques will be explored. The Class Schedule will designate software version covered.

**OIS 136.3 Word Advanced (1)**

**Recommended preparation:** A minimum grade of 'C' in OIS 136.2

**Note:** Requires 32 hours lecture/laboratory. May be open entry/open exit. May be taken 4 times.

**Transfer acceptability:** CSU

Refinement of the skills learned in OIS 136.2 and practice with the advanced features of Word applied to a variety of multi-page business documents including advanced file management; macros; customizing Word; on-screen forms; master and sub documents; tracking changes; index and table of contents; and bookmarks and cross references. The Class Schedule will designate software version covered.

**OIS 136.4 Word Special Projects (1)**

**Recommended preparation:** A minimum grade of 'C' in OIS 136.3

**Note:** Requires 32 hours lecture/laboratory. May be open entry/open exit. May be taken 4 times.

**Transfer acceptability:** CSU

Designed to aid the student in producing individual projects utilizing the most recent version of Word. Content will be decided between the student and the instructor under a signed contract.

**OIS 146.1 Shorthand Skill Development I (1)**

**Recommended preparation:** A minimum grade of 'C' in OIS 102 and minimum dictation speed of 60 wpm for three minutes

**Note:** Requires 32 hours lecture/laboratory. May be open entry/open exit.

Theory/Vocabulary: Emphasis is placed on mastering shorthand theory and vocabulary in writing and transcribing shorthand notes with speed and accuracy.

**OIS 146.2 Shorthand Skill Development II (1)**

**Recommended preparation:** A minimum grade of 'C' in OIS 146.1 and minimum dictation speed of 70 wpm for three minutes

**Note:** Requires 32 hours lecture/laboratory. May be open entry/open exit.

Speed: Emphasis is placed on further mastering shorthand theory and vocabulary in specialized areas and in writing and transcribing shorthand notes with speed and accuracy.

**OIS 146.3 Shorthand Skill Development III (1)**

**Recommended preparation:** A minimum grade of 'C' in OIS 146.2 and minimum dictation speed of 80 wpm for three minutes

**Note:** Requires 32 hours lecture/laboratory. May be open entry/open exit.

Transcription: Emphasis is placed on formatting and typing mailable transcripts from office style dictation and continued speed development to an employable skill level.

- OIS 197 Office Information Systems Topics (.5-4)**  
Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture, laboratory, or lecture/laboratory may be scheduled by the department. Refer to Class Schedule.  
**Note:** May be open entry/open exit; May be taken 4 times  
**Transfer acceptability:** CSU  
Topics in Office Information Systems. See Class Schedule for specific topic offered. Course title will designate subject covered.
- OIS 205 Office Procedures (3)**  
*2 hours lecture 3 hours laboratory*  
**Recommended preparation:** A minimum grade of 'C' in OIS 102  
**Note:** Offered in fall semester, night only  
**Transfer acceptability:** CSU  
The role of support personnel in today's office, including topics in human relations, job attitudes, and public relations; basic administrative support skills and applied procedures; practical application of office technologies; applied records management; meeting, travel, and conference planning; management and supervision skills; company politics and ethics; and changing job roles. The last six weeks of the course simulates work in either a general or medical office, depending on the student's major field of study.
- OIS 210 Law Office Procedures (3)**  
*3 hours lecture*  
**Recommended preparation:** A minimum grade of 'C' in OIS 102 and LS 121 or PLS 121  
**Note:** Offered in fall semester, night only  
**Transfer acceptability:** CSU  
Specialized vocabulary and training for the legal secretary, legal assistant, or paralegal including legal terminology, basic legal office procedures, basic court structure and procedures, legal document preparation, fast-track rules, automated legal office procedures, and legal research.
- OIS 220 Medical Transcription Procedures (3)**  
*3 hours lecture*  
Designed for the medical transcription major. Topics include career information, ethical and legal issues in medical transcription, applied English skills, and techniques for the preparation of a variety of medical reports.
- OIS 230 Secretarial Machine Transcription (1)**  
*2 hours lecture/laboratory*  
**Recommended preparation:** A minimum grade of 'C' in OIS 102  
**Transfer acceptability:** CSU  
**Note:** May be open entry/open exit.  
Techniques of transcribing dictation from a variety of business documents using transcription equipment. Designed for the Office Information Systems Administrative Assistant major.
- OIS 231.1 Medical Machine Transcription I (1)**  
**Recommended preparation:** A minimum grade of 'C' in OIS 102 and 220; MA 55 and 56  
**Note:** Requires 32 hours lecture/laboratory. May be open entry/open exit.  
**Transfer acceptability:** CSU  
Basic techniques for transcribing medical dictation from transcription equipment. Medical terminology from the SUM tapes related to the introduction of medical transcription, reports, and dermatology will be included. Designed for the Office Information Systems Medical Office Specialist or Medical Transcriptionist major.
- OIS 231.2 Medical Machine Transcription II (1)**  
**Recommended preparation:** A minimum grade of 'C' in OIS 231.1  
**Note:** Requires 32 hours lecture/laboratory. May be open entry/open exit.  
**Transfer acceptability:** CSU  
Continued development of techniques for transcribing medical dictation from transcription equipment. Medical terminology from the SUM tapes related to urology, gastroenterology, and orthopedics will be included. Designed for the Office Information Systems Medical Office Specialist or Medical Transcriptionist major.
- OIS 231.3 Medical Machine Transcription III (1)**  
**Recommended preparation:** A minimum grade of 'C' in OIS 231.2  
**Note:** Requires 32 hours lecture/laboratory. May be open entry/open exit.  
**Transfer acceptability:** CSU  
Continued development of techniques for transcribing medical dictation from transcription equipment. Medical terminology from the SUM tapes related to cardiology, pulmonary, endocrinology, and obstetrics/gynecology will be included. Designed for the Office Information Systems - Medical Transcriptionist major.
- OIS 231.4 Medical Machine Transcription IV (1)**  
**Recommended preparation:** A minimum grade of 'C' in OIS 231.3  
**Note:** Requires 32 hours lecture/laboratory. May be open entry/open exit.  
**Transfer acceptability:** CSU  
Continued development of techniques for transcribing medical dictation from transcription equipment. Medical terminology from the SUM tapes related to otorhinolaryngology, ophthalmology, neurology, and pharmacology will be included. Designed for the Office Information Systems - Medical Transcriptionist major.
- OIS 231.5 Medical Machine Transcription V (1)**  
**Recommended preparation:** A minimum grade of 'C' in OIS 231.4  
**Note:** Requires 32 hours lecture/laboratory. May be open entry/open exit.  
**Transfer acceptability:** CSU  
Advanced medical transcription applications from the American Association of Medical Transcriptionist (AAMT) tapes on radiology, general medicine, and general surgery. Designed for the Office Information Systems - Medical Transcriptionist major.
- OIS 231.6 Medical Machine Transcription VI (1)**  
**Recommended preparation:** A minimum grade of 'C' in OIS 231.5  
**Note:** Requires 32 hours lecture/laboratory. May be open entry/open exit.  
**Transfer acceptability:** CSU  
Advanced medical transcription applications from the American Association of Medical Transcriptionist (AAMT) tapes on radiology, general medicine, and general surgery. Designed for the Office Information Systems - Medical Transcriptionist major.
- OIS 232.1 Legal Machine Transcription Basic (1)**  
**Recommended preparation:** A minimum grade of 'C' in OIS 102 and 210  
**Note:** Requires 32 hours lecture/laboratory. May be open entry/open exit.  
**Transfer acceptability:** CSU  
Techniques of transcribing legal dictation from transcription equipment. Terminology includes the areas of the lawsuit, family law, and wills and probate. Designed for the Office Information Systems Legal Secretary major.
- OIS 232.2 Legal Machine Transcription Advanced (1)**  
**Recommended preparation:** A minimum grade of 'C' in OIS 232.1  
**Note:** Requires 32 hours lecture/laboratory. May be open entry/open exit.  
**Transfer acceptability:** CSU  
Advanced transcription techniques and skill development of multi page documents and specialized legal reports. Terminology includes the areas of corporations, real estate, and criminal law. Designed for the Office Information Systems Legal Secretary major.

## Paralegal Studies (PLS)

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

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

### PROGRAM OF STUDY

#### Legal Support Assistant

For students who are interested in working within the legal field. This certificate program prepares the student for entry-level legal work, or enhances the skills

of those students already working in law offices, corporations, the courts, or government agencies.

A Certificate of Proficiency will be awarded to students who successfully complete the courses listed below.

### CERTIFICATE OF PROFICIENCY

Program Requirements		Units
BUS 205	Business Writing	3
LS/PLS 121	Introduction to Law	3
LS 145	Legal Ethics	3
OIS 115	Filing and Records Management	1
OIS 210	Law Office Procedures I	3
PLS 110	Computer for Paralegals-Beginning	2
	Demonstrate the ability to type 35 words per minute	
<b>TOTAL UNITS</b>		<b>15</b>

Recommended Electives: BUS 110, 125; OIS 102

### COURSE OFFERINGS

Courses numbered under 100 are not intended for transfer credit.

- PLS 50 CLA Exam Preparation (3)**  
*3 hours lecture*  
**Recommended preparation:** Completion of Paralegal Studies Program or seven years experience as a paralegal  
**Note:** Credit/No Credit grading only  
 An intensive review of substantive and procedural areas of the law to prepare for the Certified Legal Assistant (CLA) examination offered by the National Association of Legal Assistants. Successful completion of this examination certifies competence in the paralegal field and has been adopted by California as the qualifying standard for paralegals seeking advanced certification in specialty areas of practice.
- PLS 110 Computer Literacy for Paralegals-Beginning (2)**  
*4 hours lecture/laboratory*  
**Transfer acceptability:** CSU  
 This course is an introduction to computer technology and its application within the law firm with emphasis on word processing, database management, and spreadsheets.
- PLS 120 Introduction to Paralegal Studies and Ethics (3)**  
*3 hours lecture*  
**Transfer acceptability:** CSU  
 An overview of the role of the paralegal/legal assistant. Introduction to legal terminology, ethics in the law office, management of legal data, and research methods.
- PLS 121 Introduction to Law (3)**  
*3 hours lecture*  
**Note:** Cross listed as LS 121  
**Transfer acceptability:** CSU  
 An introduction to law and the legal system. Includes an examination of the federal and state court system, criminal law, civil law, administrative law, and procedural law.
- PLS 130 Client Interviewing and Investigations (2)**  
*2 hours lecture*  
**Prerequisite:** A minimum grade of 'C' in PLS 120  
**Recommended preparation:** A minimum grade of 'C' in LS 121 or PLS 121  
**Transfer acceptability:** CSU  
 The process of interviewing clients and witnesses by a paralegal in preparing a legal matter for resolution or possible litigation. The investigative process includes both formal and informal investigations by the paralegal.
- PLS 140 Contract Law (3)**  
*3 hours lecture*  
**Prerequisite:** LS/PLS 121  
**Transfer acceptability:** CSU  
 This course is intended to provide the student with an in-depth analysis of the law pertaining to contract formation, and the resolution of contract disputes. Students will become familiar with basic contract drafting and interpretation.
- PLS 150 Legal Research (2)**  
*2 hours lecture*  
**Recommended preparation:** A minimum grade of 'C' in ENG 100  
**Note:** Cross listed as LS 150  
**Transfer acceptability:** CSU  
 The fundamental aspects of legal research through an in-depth analysis of case law, statutory law and administrative law on both a Federal and State level. It will further instruct the student on the appropriate use of secondary sources used in legal research.
- PLS 155 Legal Writing (1)**  
*1 hour lecture*  
**Prerequisite:** LS/PLS 150 and ENG 100  
**Note:** Cross listed as LS 155  
**Transfer acceptability:** CSU  
 The techniques of legal writing and analysis as applied to the drafting of a legal memorandum, case briefing, and law office correspondence. Using legal research skills developed in PLS 150/LS 150 to formulate written answers, in proper legal format, to legal issues and questions presented.
- PLS 160 Computer Assisted Legal Research (1)**  
*2 hours lecture/laboratory*  
**Prerequisite:** LS/PLS 155  
**Recommended preparation:** PLS 110 or BUS 170 and 171  
**Note:** Credit/No Credit grading only  
**Transfer acceptability:** CSU  
 Computer assisted legal research addressing the role of the paralegal conducting legal research utilizing CD ROMs, database systems, Westlaw, Lexis, and the Internet.
- PLS 170 Alternative Dispute Resolution (2)**  
*2 hours lecture*  
**Prerequisite:** LS/PLS 121  
 Alternative Dispute Resolution (ADR) utilizes various processes to settle disputes without a court adjudication, i.e., an alternative to civil dispute resolution. This course will review minitrial, settlement conference, conciliation, and emphasize negotiation mediation, and arbitration. The role of the paralegal in ADR will be addressed and a review of the essential laws.
- PLS 190 Clinical Studies (3)**  
*9 hours laboratory*  
**Prerequisite:** LS/PLS 121  
**Note:** Cross listed as LS 190; may be taken 3 times  
**Transfer acceptability:** CSU  
 This course provides the student with an opportunity to gain practical work experience within the legal field. The student will complete 120 hours of work at the internship site and attend three seminars during the semester that will focus on transitioning to the work force.
- PLS 197 Paralegal Studies Topics (.5-4)**  
 Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture, laboratory, or lecture/laboratory may be scheduled by the department. Refer to Class Schedule.  
**Note:** May be taken 4 times  
**Transfer acceptability:** CSU  
 Topics in Paralegal Studies. See Class Schedule for specific topic covered. Course title will designate subject covered.

- PLS 210 Computer Literacy for Paralegals – Advanced** (2)  
4 hours lecture/laboratory  
**Transfer acceptability:** CSU  
This course will prepare the student to perform at an intermediate to advanced level in all areas of computer applications related to the legal profession. The student will be using state of the art software and hardware, receiving hands-on instruction and practical applications in the use of the MSOffice Suite, docket control and legal billing software, PowerPoint presentations using an LCD projection system, online court reporting, record search and retrieval, document scanning, Internet searches, electronic mail, file formats, printing procedures, and file management in a networked environment. The course also includes creation of a portfolio of student work to display computer literacy skills.
- PLS 240 Civil Liberties and Procedures** (3)  
3 hours lecture  
**Recommended preparation:** ENG 50 or eligibility for ENG 100  
**Note:** Cross listed as LS 240  
**Transfer acceptability:** CSU  
The study of the Bill of Rights and Supreme Court decisions focusing on civil rights and liberties. This area of constitutional law exams the relationship between individuals and government. Emphasis is on minority issues such as privacy, personal freedom, political equality, and first amendment jurisprudence.
- PLS 245 Civil Litigation I** (3)  
3 hours lecture  
**Prerequisite:** LS/PLS 121  
**Note:** Cross listed as LS 245  
**Transfer acceptability:** CSU  
The basic principles of civil procedures as they apply to jurisdiction, venue and pleadings required from both complainant and defense as viewed within the California Court System.
- PLS 246 Civil Litigation II** (2)  
2 hours lecture  
**Prerequisite:** LS/PLS 245  
**Transfer acceptability:** CSU  
Continuation of Civil Litigation I with an increased emphasis on research and development of in-depth knowledge of selected topics within the field of civil litigation.
- PLS 248 Business Organizations** (2)  
2 hours lecture  
**Prerequisite:** LS/PLS 121  
**Recommended preparation:** PLS 160  
**Note:** Graded only  
**Transfer acceptability:** CSU  
The role of the paralegal in corporate law will be emphasized with all business organizations reviewed; i.e., sole proprietorship, partnerships, and corporations. The primary focus will be on corporate formation and compliance.
- PLS 251 Probate Law and Procedure** (2)  
2 hours lecture  
**Prerequisite:** LS/PLS 121  
**Transfer acceptability:** CSU  
An overview of the procedural structure of basic probate court policies and practice. All necessary forms and pleadings will be examined and prepared.
- PLS 255 Family Law and Procedure** (2)  
Two hours lecture (2)  
**Prerequisite:** LS/PLS 121  
**Transfer acceptability:** CSU  
A concentration on domestic relations concerned with such subjects as paternity, custody, support, child care, and separation, with special emphasis given to the dissolution of marriage. The student will prepare the proper forms for dissolution and related matters. Concepts of separate and community property and division of property upon dissolution are also covered. Various other aspects of family law are discussed.
- PLS 258 Bankruptcy Law and Procedure** (2)  
2 hours lecture  
**Prerequisite:** LS/PLS 121  
**Transfer acceptability:** CSU  
Introduction to bankruptcy emphasizing both debtor relief and debt collection under the United States Bankruptcy Code. The bankruptcy system is analyzed from an historical as well as a contemporary posture reflecting current practices, philosophies, and bankruptcy alternatives.
- PLS 259 Real Property Law and Procedure** (2)  
2 hours lecture  
**Prerequisite:** LS/PLS 121  
**Transfer acceptability:** CSU  
California real property law: titles, community property, liens, sales contracts, escrow, separate property and property transfers. How ownership is acquired, transferred, and the legal rights and duties of the parties. Preparation of the proper forms and documents incident to real estate ownership and leasehold interest.
- PLS 261 Torts and Personal Injury** (3)  
3 hours lecture  
**Prerequisite:** LS/PLS 121  
**Recommended preparation:** PLS 160  
**Transfer acceptability:** CSU  
An overview of substantive tort law with an emphasis on procedure. An examination of negligence and an overview of insurance law, to include forms, and the preparation of an actual case for arbitration and trial.
- PLS 263 Administrative Law and Procedure** (2)  
2 hours lecture  
**Prerequisite:** LS/PLS 121  
**Recommended preparation:** PLS 160  
**Transfer acceptability:** CSU  
The study of Administrative Law to include the legislative process, various agencies, and rule making and adjudication. The focus of this course is on administrative procedure, i.e., the-doing-of administrative law.
- PLS 265 Criminal Law and Procedure** (2)  
2 hours lecture  
**Prerequisite:** LS/PLS 121  
**Recommended preparation:** ENG 100 and LS/PLS 150  
**Transfer acceptability:** CSU  
An overview of substantive criminal law and the criminal justice process with an emphasis on criminal procedures through which criminal law is enforced.
- PLS 270 Intellectual Property** (2)  
2 hours lecture  
**Prerequisite:** LS/PLS 121  
**Transfer acceptability:** CSU  
Intellectual Property provides an overview of the law for paralegals who may wish to specialize in this area of practice. This course will focus on the role of the paralegal, as part of the legal team, in protecting patents, trademarks, and copyrights in the global marketplace.
- PLS 271 Elder Law and Procedure** (2)  
2 hours lecture  
**Prerequisite:** LS/PLS 121  
**Recommended preparation:** LS/PLS 150 and LS/PLS 155  
Elder Law focuses on a comprehensive review of the law relative to elders, as one the fastest growing areas in the field. The course will cover many different areas of the law having an impact on the elderly, including various important documents used in practice.
- PLS 273 Immigration Law and Procedure** (2)  
2 hours lecture  
**Prerequisite:** LS/PLS 121  
**Recommended preparation:** PLS 160  
**Note:** Graded only

**Transfer acceptability:** CSU

This course will provide an overview of the basic principles of immigration law and procedure. Federal law and cases will be reviewed, along with legal principles of immigration law.

**PLS 275 Employment Law and Practice (2)**

2 hours lecture

**Prerequisite:** LS/PLS 121

**Recommended preparation:** LS/PLS 150 and LS/PLS 155

Employment law for paralegals. An introduction to the regulatory environment, common law principles, and an overview of labor relation law. The course will review ADA, sexual harassment, discrimination, and employees' rights.

**PLS 290 Contemporary Legal Issues (2)**

2 hours lecture

**Prerequisite:** LS/PLS 150

**Note:** Cross listed as LS 290

**Transfer acceptability:** CSU

Contemporary legal issues will be explored by leading experts in the field via TV broadcasts. Seminars will be conducted for the purpose of further developing legal issues and completing a research project. Students will be encouraged to submit research projects to AAFPE for publication in the American Association for Paralegal Education Law Journal. This capstone course focuses on advanced legal writing, analysis, and research.

**PLS 295 Directed Study in Paralegal Studies (1,2,3)**

3, 6, or 9 hours laboratory

**Prerequisite:** Approval of project or research by department chairperson

**Note:** May be taken 2 times

**Transfer acceptability:** CSU

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

## Philosophy (PHIL)

Contact the Behavioral Sciences Department for further information, (760) 744-1150, ext. 2330

### COURSE OFFERINGS

**PHIL 100 Philosophical Theories Ethical and Political Values (3)**

3 hours lecture

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

An introduction to philosophical thinking through the study of ethical and political values using a combination problem and historical approach. Relations between philosophical problems and those of science, society, and ordinary life are stressed. Both classical and modern reading sources are used.

**PHIL 101 Philosophical Theories Knowledge and Reality (3)**

3 hours lecture

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

An introductory course to philosophical problems emphasizing methodology and the fundamental problems of knowledge and reality. Detailed consideration is to be given to the empirical method and to rationalism. Readings are taken from both classical and contemporary sources.

**PHIL 102 Analytical Reasoning (3)**

3 hours lecture

**Recommended preparation:** Eligibility for ENG 100

**Transfer acceptability:** CSU; UC

Introduction to the relationship of language to logic, with applications of analysis, criticism, inductive and deductive reasoning and kinds of evidence to philosophical problems.

**PHIL 105 Philosophy of Religion (3)**

3 hours lecture

**Transfer acceptability:** CSU; UC

A critical consideration of selected perennial and modern problems: definition and role of religion and religious experience, mysticism, grounds for religious beliefs, and religious ethics. Students will be urged to evaluate critically their views of religion and their own religious beliefs. Both Eastern and Western religions will be considered.

**PHIL 110 Asian Philosophies (3)**

3 hours lecture

**Transfer acceptability:** CSU; UC

A critical examination of the philosophies which originated in Asia, including consideration of the practices which are associated with these belief systems. Several theories of meditation will be discussed. Some comparisons will be made to western attitudes and beliefs.

**PHIL 115 Logic and Critical Thinking (3)**

3 hours lecture

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

**Transfer acceptability:** CSU; UC

Development of skills for critical thinking including open mindedness, functions and wayward uses of language, informal fallacies, hypotheses and inductive reasoning, and elementary deductive inference forms. Basic communication skills, especially written, are developed and a critical perspective on world views is emphasized.

**PHIL 120 Logic (3)**

3 hours lecture

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

An analysis of arguments and the cognitive functions of language through the use of modern symbolic techniques.

**PHIL 130 Contemporary Philosophical Movements (3)**

3 hours lecture

**Note:** May be taken 2 times

**Transfer acceptability:** CSU; UC

A critical examination of philosophical movements that has influenced 20th Century views of the individual, society and reality, such as Existentialism, Marxism, Pragmatism and Transcendentalism. The movement of thought will be approached as an attempt to deal reflectively with certain problems of living in the modern world. The philosophy studied will vary from semester to semester.

**PHIL 135 Pre Renaissance Western Philosophy (3)**

3 hours lecture

**Transfer acceptability:** CSU; UC

Major Western philosophical views from the early Greeks through the 14th Century. Original philosophical works of the periods will be studied and evaluated through critical thinking and writing.

**PHIL 136 Renaissance and Modern Western Philosophy (3)**

3 hours lecture

**Transfer acceptability:** CSU; UC

Major Western philosophical views from the Renaissance to the present. Original philosophical works of the periods will be studied and evaluated through critical thinking and writing.

**PHIL 191 Verbal Reasoning I (3)**

3 hours lecture

**Note:** May be taken 4 times

Preparation for the Verbal Reasoning section of the Medical College Admission Tests.

**PHIL 192 Verbal Reasoning II (3)**

3 hours lecture

**Note:** May be taken 4 times

Preparation for the Verbal Reasoning section of the Medical College Admission Tests through application of verbal reasoning concepts by learning partners.



**PHIL 197 Philosophy Topics (1.5-6)**  
 Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture, laboratory, or lecture/laboratory may be scheduled by the department. Refer to Class Schedule.

**Note:** May be taken 4 times

**Transfer acceptability:** CSU

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

**PHIL 255 Literature and Ideas (3)**  
 3 hours lecture

**Prerequisite:** Eligibility for ENG 100

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

**Transfer acceptability:** CSU; UC

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

**PHIL 295 Directed Study in Philosophy (1,2,3)**  
 1, 2, or 3 hours lecture

**Prerequisite:** Enrollment subject to project approval

**Note:** May be taken 4 times

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

An individualized or group project in philosophy of any nature approved by, and under the personal supervision of, the instructor.

## Photography (PHOT)

See also Journalism

Contact the Communications Department for further information, (760) 744-1150, ext. 2440. For transfer information, consult a Palomar College counselor.

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

### PROGRAMS OF STUDY

#### Commercial Photography

This Certificate is designed to provide an avenue for those students interested in pursuing a career as a professional photographer in the areas of advertising photography, product photography, portrait and wedding photography, photojournalism, editorial and documentary photography and other photo related vocations. Courses address technique, aesthetics, ethics and business practices. See course description for specific topics and prerequisites.

#### CERTIFICATE OF PROFICIENCY

Program Requirements	Units
PHOT/	
JOUR 140*	Photojournalism 3.5
PHOT 209*	Photographic Portfolio 2
PHOT 220*	Commercial Photography 3.5
PHOT 225*	Photographic Portraiture 3
PHOT 230*	Digital Darkroom 3.5
<b>TOTAL UNITS</b>	<b>15.5</b>

\*This course has a prerequisite.

#### Digital Imaging

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

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

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

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

**TOTAL UNITS 28**

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

#### Fine Art Photography

This certificate is designed to provide an avenue for those students interested in pursuing a career as a fine art photographer. The course work will address a range of technical issues, personal expression, aesthetics, criticism, portfolio development, business practices, and history. See course description for specific topics and prerequisites.

#### CERTIFICATE OF PROFICIENCY

Program Requirements	Units
PHOT 125	History and Criticism of Photography 3
PHOT 201	Elementary Color Negative Printing 3
PHOT 209	Photographic Portfolio 2
PHOT 210	Advanced Black and White Photography 3
PHOT 215	Creative Photography 3
PHOT 216	Alternative Photographic Processes 3

**TOTAL UNITS 17**

#### Photography

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

Program Requirements	Units
PHOT 100	Elementary Photography 3.5
PHOT 105	Intermediate Black/White Photography 3.5
PHOT 125	History/Criticism of Photography 3
PHOT/JOUR 140	Photojournalism 3.5
PHOT 201	Elementary Color Negative Printing 3
PHOT 210	Advanced Black and White Photography 3
PHOT 220	Commercial Photography 3.5
PHOT 225	Photographic Portraiture 3
PHOT 230	Digital Darkroom 3.5
GC/R GC 140	Digital Imaging/Photoshop I 3

#### Electives (Select a minimum of 6 units)

PHOT 50	Digital Camera 3
PHOT 110	Basic 35mm Color Photography 3
PHOT 115	Creative 35mm Color Photography 3
PHOT 150	Digital Photography I 3.5
PHOT 170	Photo and Photographers of California 3
PHOT 197A or	Photography Topics: Field Studies

PHOT 197B or	Photo Topics: Technical Studies	
PHOT 197C	Photographic Topics: General	1,2,3
PHOT 202	Intermediate Color Printing	3
PHOT 203	Color Printing Workshop	2
PHOT 209	Photographic Portfolio	2
PHOT 212	Landscape Photography	2
PHOT 215	Creative Photography	3
PHOT 216	Alternative Photo Processes	3
PHOT 296	Special Projects	1,2,3
<b>TOTAL UNITS</b>		<b>38.5</b>

### COURSE OFFERINGS

<b>PHOT 50</b>	<b>Digital Camera</b>	<b>(3)</b>
<i>3 hours lecture</i>		
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.		
<b>PHOT 100</b>	<b>Elementary Photography</b>	<b>(3.5)</b>
<i>7 hours lecture/laboratory</i>		
<b>Transfer acceptability:</b> CSU; UC; CAN ART 18		
Introduction to the mechanics, optics, chemistry, lighting principles, and practices of elementary photography. Explores the history, aesthetics, and the conceptualization of photographic imagery. Includes darkroom procedures in developing, printing, and finishing black and white photographic materials.		
<b>PHOT 105</b>	<b>Intermediate Black and White Photography</b>	<b>(3.5)</b>
<i>7 hours lecture/laboratory</i>		
<b>Prerequisite:</b> PHOT 100		
<b>Transfer acceptability:</b> CSU; UC		
This course continues the study of the art and techniques associated with black and white photography. Problems relating to small and medium format camera systems and optics will be identified and compared. Further refinement in darkroom procedures and aesthetics will be explored.		
<b>PHOT 110</b>	<b>Basic 35mm Color Photography</b>	<b>(3)</b>
<i>3 hours lecture</i>		
<b>Transfer acceptability:</b> CSU		
An introduction to 35mm color slide photography including materials, techniques, and composition. Field trips, critiques, and discussions will be held on assigned topics. No darkroom laboratory.		
<b>PHOT 115</b>	<b>Creative 35mm Color Photography</b>	<b>(3)</b>
<i>3 hours lecture</i>		
<b>Prerequisite:</b> PHOT 100, 105, or 110		
<b>Transfer acceptability:</b> CSU		
Use of the 35mm camera and color films applied to creative solutions to problems relating to color, texture, line, form, and composition. Critique and discussion on assigned subjects. No darkroom laboratory.		
<b>PHOT 125</b>	<b>History and Criticism of Photography</b>	<b>(3)</b>
<i>3 hours lecture</i>		
<b>Transfer acceptability:</b> 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.		
<b>PHOT 140</b>	<b>Photojournalism</b>	<b>(3.5)</b>
<i>7 hours lecture/laboratory</i>		
<b>Prerequisite:</b> PHOT 100 or 110		
<b>Note:</b> Cross listed as JOUR 140		

### **Transfer acceptability:** CSU

A study of the history and practice of photojournalism, providing specific application through photographing for The Telescope, Palomar College's newspaper. Student must provide own camera.

### **PHOT 150 Digital Photography I (3.5)**

*7 hours lecture/lab*

Lecture and laboratory activities will permit each student to discover the applications of electronic imaging for still photographers. Emphasis is placed on digital camera capture, image editing and quality digital output. The aesthetics and technology of digital photography will be discussed in lecture and critique sessions.

### **PHOT 170 The Photography and Photographers of California (3)**

*6 hours lecture/laboratory*

**Prerequisite:** PHOT 100

**Note:** May be taken 2 times

**Transfer acceptability:** CSU; UC – PHOT 125 and 170 combined: maximum credit, one course

A survey and comparison of past and present California photographers and their work. An analysis of their philosophies and practices as it applies to the execution of photography as both an art and communication medium. There are numerous visitations with established photographers and galleries. Usually will require one trip of several days outside of the local area.

### **PHOT 197A Photography Topics: Field Studies (.5-4)**

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

**Note:** May be taken 4 times

**Transfer acceptability:** CSU

Topics in Photography, Field Studies. See Class Schedule for specific topic offered. Course title will designate subject covered.

### **PHOT 197B Photography Topics: Technical Studies (.5-4)**

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

**Note:** May be taken 4 times

**Transfer acceptability:** CSU

Topics in Photography, Technical Studies. See Class Schedule for specific topic offered. Course title will designate subject covered.

### **PHOT 197C Photography Topics: General (.5-4)**

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

**Note:** May be taken 4 times

**Transfer acceptability:** CSU

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

### **PHOT 201 Elementary Color Negative Printing (3)**

*7 hours lecture/laboratory*

**Prerequisite:** PHOT 105

**Transfer acceptability:** CSU

An introduction to the techniques and aesthetics of color negative printing. History, materials, processes, and vision will be explored.

### **PHOT 202 Intermediate Color Printing (3)**

*7 hours lecture/laboratory*

**Prerequisite:** PHOT 201

**Transfer acceptability:** CSU

A continuation of PHOT 201 with an emphasis on refined color printing skills. Color theory, image content, and printing excellence as well as contemporary issues will be stressed. Color positive printing will be introduced.

**PHOT 203 Color Printing Workshop (2)**

4 hours lecture/laboratory

**Prerequisite:** PHOT 201**Note:** May be taken 3 times**Transfer acceptability:** CSU

A continuing investigation of the creative uses of color negative and positive processes using portfolio and book projects to refine color skills. Emphasis on concepts and techniques in color. Students will be required to employ their developing visual literacy, analytical skills and subjective thought.

**PHOT 209 Photographic Portfolio (2)**

4 hours lecture/laboratory

**Prerequisite:** PHOT 105**Note:** May be taken 3 times**Transfer acceptability:** CSU

Methods of portfolio design and production, goal setting, market research, resumes, artist statements, cover and inquiry letters and self-promotion for a range of career, scholastic and artistic purposes. Students will be required to employ their developing visual literacy, analytical skills and subjective thought. Field trips and classroom visits by working professionals will be incorporated.

**PHOT 210 Advanced Black and White Photography (3)**

6 hours lecture/laboratory

**Prerequisite:** PHOT 105**Transfer acceptability:** CSU; UC

An exploration of the creative and technical possibilities through various assignments aimed at developing a personal style and approach to the production of quality black and white photography. A study of the relationship between film exposure and development and its application in the "zone system" is stressed.

**PHOT 212 Landscape Photography (2)**

5 hours lecture/laboratory

**Prerequisite:** PHOT 100**Note:** May be taken 4 times**Transfer acceptability:** CSU

A survey and comparison of past and present landscape photography. An analysis of different philosophies and approaches as it applies to different locations. Usually will require one trip of several days outside of the local area.

**PHOT 215 Creative Photography (3)**

7 hours lecture/laboratory

**Prerequisite:** PHOT 100**Transfer acceptability:** CSU; UC

Exploration of photography as an art form using both conventional and non conventional silver and non silver processes to permit broad variations and approaches to photographic expression.

**PHOT 216 Alternative Photographic Processes (3)**

7 hours lecture/laboratory

**Prerequisite:** PHOT 105**Transfer acceptability:** CSU

A practical, hands-on survey of historical alternatives and contemporary variations to the modern standard photographic process. Silver, Ferric, Dichromate, and Photomechanical possibilities for self expression will be explored. Typical processes learned will include Van Dyke, Cyanotype, Platinum and Palladium Kallitype, Bromoil, and gum printing.

**PHOT 220 Commercial Photography (3.5)**

7 hours lecture/laboratory

**Prerequisite:** PHOT 105**Transfer acceptability:** CSU

Considerations of professional technical fundamentals in lighting, film, camera systems, and management as applied in studio and location photography for commercial, advertising, and promotional purposes.

**PHOT 225 Photographic Portraiture (3)**

6 hours lecture/laboratory

**Prerequisite:** PHOT 105**Transfer acceptability:** CSU

Techniques and styles of photographic portraiture. Studio and non studio applications will be explored using black and white and color films. Emphasis on lighting equipment and techniques.

**PHOT 230 Digital Darkroom (3.5)**

7 hours lecture/laboratory

**Prerequisite:** GC 140 and PHOT 100**Note:** May be taken 2 times**Transfer acceptability:** CSU

Introduction to the technology of digital (electronic) photography using traditional and digital cameras, the computer, and industry standard imaging software as the primary photographic processing and manipulation tools. Continuing instruction in digital image processing directed toward photographic output. Exploration of capabilities and use of the digital darkroom.

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

3, 6, or 9 hours laboratory

**Prerequisite:** PHOT 105**Note:** May be taken 3 times**Transfer acceptability:** CSU

Requires demonstrated proficiency in photography and the creative ability and initiative to work independently on a particular sustained project which does not fit in the context of regularly scheduled classes. Could include portfolio preparation.

## Physical Education (PE)

See also Athletics and Competitive Sports

Contact the Physical Education Department for further information, (760) 744-1150, ext. 2462. For transfer information, consult a Palomar College counselor.

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

### PROGRAMS OF STUDY

#### Adult Fitness/Health Management

Training for fitness instructors and lifestyle educators in designing, implementing and managing a variety of health/fitness programs.

#### CERTIFICATE OF ACHIEVEMENT

Program Requirements		Units
BMGT 105	Small Business Management	3
BUS 140	Selling for Business	3
CSIS 105	Computer Concepts/Microcomputer Applications	3
FCS 165/HE 165	Fundamentals of Nutrition	3
HE 100	Health Education and Fitness Dynamics	3
HE 100L	Health Performance Lab	1-2
PE 104/EME 100	Advanced First Aid	3
PSYC 100	Introduction to Psychology	3
ZOO 205	Physiology Lecture	3
CE 100	Cooperative Education	2-4

**Group I (Select a minimum of 3 units)**

ENG 100	English Composition	4
MATH 120	Elementary Statistics	3
SPCH 100	Oral Communication	3

**Group II (Select a minimum of 3 units)**

FCS 170	Nutrition: Eating Disorders and Obesity	3
PSYC 115	Psychology of Personal Growth and Development	3
PSYC 210	Physiological Psychology	4
SOC 125/ PSYC 125	Human Sexuality	3

**Group III (Select a minimum of 3 units)**

PE 100	Introduction to Physical Education	2
PE 125	Physical Fitness	1-2
PE 128	Wellness Activities	1-2
PE 129	Aerobics/Step	1-2
PE 151	Intermediate Weight Training	1-1.5
PE 165	Coed Softball	1-1.5
PE 168	Soccer	1-1.5
PE 231	Water Safety Instruction	3
PE 232	Teaching Swimming	1-1.5

**TOTAL UNITS** **36 - 39**

**Physical Education**

Provides the student with background to begin upper division coursework and serves as preparation for entry level jobs in health clubs, non-credentialed physical education and coaching positions, and as recreation aides. Transfer students should consult the four year college or university catalog for specific requirements or see a Palomar College counselor.

**A.A. DEGREE MAJOR**

Program Requirements		Units
HE 100	Health Education and Fitness Dynamics	3
HE 100L	Health Performance Lab	1-2
HE 165/FCS 165	Fundamentals of Nutrition	3
PE 100	Introduction to Physical Education	2
PE 104/EME 100	Advanced First Aid	3
PE 129	Aerobics/Step	1-1.5
PE 231	Water Safety Instruction	3
PSYC 100	Introduction to Psychology	3
ZOO 200	Anatomy	5
ZOO 205	Physiology Lecture	3

**Plus 3 of the following team skill courses (An ACS course in these sports may be substituted for one)**

PE 137	Water Polo	1
PE 156	Intermediate Volleyball	1-1.5
PE 165	Coed Softball	1-1.5
PE 166	Basketball	1
PE 168	Soccer	1-1.5
PE 210	Professional Preparation for Football	1-2
PE 212	Professional Preparation for Baseball	1-2

**Plus 3 of the following individual skill courses (An ACS course in these sports may be substituted for one)**

PE 118	Intermediate Golf	1-1.5
PE 127	Aquatic Exercises	1-2
PE 136	Intermediate Swimming	1-1.5
PE 141	Intermediate Tennis	1-1.5
PE 150	Beginning Weight Training	1-1.5

**TOTAL UNITS** **33 - 39**

**COURSE OFFERINGS**

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

An activity may be taken four times for credit. Activity is defined to include all ability levels. (e.g., A student may take a total of only four tennis courses for credit.)

UC – All ACS and PE activity courses combined: maximum credit, 4 units

CSU – No limit on PE activity credit

**PE 47 Physical Education Topics (.5-4)**

Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture, laboratory, or lecture/labora-

tory may be scheduled by the department. Refer to Class Schedule.

**Note:** May be taken 4 times

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

**PE 83 Cheerleading (3)**

6 hours lecture/laboratory

**Prerequisite:** Enrollment subject to audition

**Recommended preparation:** Previous cheerleading experience

**Note:** This is a TBA class and will require travel away from the college on weekends and other dates; may be taken 4 times

Designed to teach the fundamentals of cheerleading. Students will explore practical and theoretical aspects of competitive and non-competitive cheerleading. Students will acquire knowledge of, and respect for, the skills needed to perform at college events and competition.

**PE 100 Introduction to Physical Education (2)**

2 hours lecture

**Transfer acceptability:** CSU; UC

An interpretation of the field designed to give the prospective major student an understanding of its scope. History and principles of physical education. Study of the objectives of modern physical education with a view toward the development of a basic philosophy and background for professional education.

**PE 102 Physical Education in Elementary Schools (3)**

3 hours lecture

**Transfer acceptability:** CSU

Develop understanding, knowledge, and appreciation of physical education activities adapted to the needs and interests of elementary school children. Experience in planning, writing and conducting physical education programs and curriculum.

**PE 104 Advanced First Aid (3)**

3 hours lecture

**Note:** Cross listed a EME 100

**Transfer acceptability:** CSU; UC

The study and application of emergency medical skills and procedures, including basic anatomy and physiology, terminology, and prevention of disease transmission, for CPR certification from the American Heart Association and/or the American Red Cross.

**PE 110 Beginning Badminton (1,1.5)**

2 or 3 hours lecture/laboratory

**Note:** Maximum of 4 completions in any combination of PE 110, PE 111

**Transfer acceptability:** CSU; UC

Recreational and competitive skill levels for beginner and advanced beginner. A development of mental and physical skills such as: interpreting rules and regulations, tactics and strategies, sport etiquette and sport-specific motor skills.

**PE 111 Intermediate Badminton (1,1.5)**

2 or 3 hours lecture/laboratory

**Note:** Maximum of 4 completions in any combination of PE 110, PE 111

**Transfer acceptability:** CSU; UC

Development of competency in badminton strokes, and defensive and offensive tactics in singles and doubles match play.

**PE 112 Yoga (1,1.5,2)**

2, 3 or 4 hours lecture/laboratory

**Note:** May be taken 4 times

**Transfer acceptability:** CSU; UC

Investigation and practice of the principles of Physical Hatha Yoga. Emphasis is on improved body alignment, joint flexibility, muscle tone and breathing.

**PE 114 Walkfit (1,1.5)**

2 or 3 hours lecture/laboratory

**Note:** May be taken 4 times

**Transfer acceptability:** CSU; UC

Instruction and training in walking techniques to increase endurance and fitness levels.

- PE 115 Bowling** (1.5)  
3 hours lecture/laboratory  
**Transfer acceptability:** CSU; UC  
Competency development in selection of ball, approach, delivery, scoring, and league experience. Class meets off campus.
- PE 116 Aikido** (1,1.5,2)  
2, 3, or 4 hours lecture/laboratory  
**Note:** May be taken 4 times  
**Transfer acceptability:** CSU; UC  
Introduction to and a survey of Aikido, a non-aggressive, non-competitive martial art. Based upon a philosophy that underscores the importance of harmony with nature and control of body and mind. The significance of good posture, physical skill, reflexes, responsibility, and etiquette is emphasized.
- PE 117 Beginning Golf** (1,1.5)  
2 or 3 hours lecture/laboratory  
**Note:** Maximum of 4 completions in any combination of PE 117, PE 118, PE 119, PE 216 (Golf)  
**Transfer acceptability:** CSU; UC  
Skill development in the use of various clubs, scoring, and playing etiquette.
- PE 118 Intermediate Golf** (1,1.5)  
2 or 3 hours lecture/laboratory  
**Note:** Maximum of 4 completions in any combination of PE 117, PE 118, PE 119, PE 216 (Golf)  
**Transfer acceptability:** CSU; UC  
A course designed for those students who are not ready to play on a regulation golf course but have mastered the basic skills of beginning golf. This course will include the techniques (pitching, chipping, putting, sand shots and wood shots) that should enable the student to play a successful round of golf. Rules, situation analysis, and course strategy will also be covered.
- PE 119 Advanced Golf** (1,1.5)  
2 or 3 hours lecture/laboratory  
**Note:** Maximum of 4 completions in any combination of PE 117, PE 118, PE 119, PE 216 (Golf)  
**Transfer acceptability:** CSU; UC  
Development of playing strategies. Emphasis on swing techniques and mental approach to golf game. Wise use of practice time. Competency in the rules of golf. Classes held off campus.
- PE 120 Beginning Surfing** (1,1.5)  
2 or 3 hours lecture/laboratory  
**Note:** May be taken 4 times; maximum of 4 completions in any combination of PE 120; 121  
**Transfer acceptability:** CSU; UC  
Introduction to beginning surfing is designed to meet the needs of the beginning level surfer. Instruction will cover such topics as: historical perspectives of surfing, ocean safety, surfing etiquette, wave selection, proper paddling and appropriate take-off procedures. Students will be required to provide their own equipment.
- PE 121 Intermediate Surfing** (1,1.5)  
2 or 3 hours lecture/laboratory  
**Note:** May be taken 4 times; maximum of 4 completions in any combination of PE 120; 121  
**Transfer acceptability:** CSU; UC  
Concepts of intermediate surfing are designed for the intermediate level surfer who can negotiate waves and do basic turns on a consistent basis. Ocean knowledge such as currents, wave development, wind pattern and ocean floor terrain will be presented. Students will be taught short and longboard maneuvers such as: Duck dive, cutback, "off the lip", roundhouse, sideslip, crossover and walk to nose. Students will become confident in riding surf, four feet or larger. Students will be required to provide their own equipment.
- PE 125 Physical Fitness** (1,1.5,2)  
2, 3, or 4 hours lecture/laboratory  
**Note:** May be taken 4 times  
**Transfer acceptability:** CSU; UC  
Training in endurance, flexibility, and strength. Methods to achieve training include: swimming, running, walking, step bench, weight training, strength training, and/or cycling. Emphasis is on pre testing, post testing, and the development of personal fitness.
- PE 127 Aquatic Exercises** (1,1.5,2)  
2, 3, or 4 hours lecture/laboratory  
**Transfer acceptability:** CSU; UC  
Rhythmical and aerobic movement in water designed to improve flexibility, strength, and endurance.
- PE 128 Wellness Activities** (1,1.5,2)  
3, 4.5, 6 hours laboratory  
**Note:** Open entry/Open exit; Credit/No Credit grading only; may not be taken as an audit.  
**Transfer acceptability:** CSU; UC  
Physical conditioning through aerobic fitness, flexibility, and resistance training programs. Activities include treadmill, stairmaster, stationary biking, rowing, and weight machines. Individualized tests determine the conditioning program and the level of performance expected.
- PE 129 Aerobics/Step** (1,1.5,2)  
2, 3, or 4 hours lecture/laboratory  
**Transfer acceptability:** CSU; UC  
Improve cardiovascular fitness through a variety of aerobic exercises. The development of strength, endurance, flexibility, and coordination using optional resistance equipment such as step benches, hand weights, and flex bands.
- PE 130 Individualized Fitness Exercise** (1,1.5,2)  
2, 3, or 4 hours lecture/laboratory  
**Note:** May be taken 4 times  
**Transfer acceptability:** CSU; UC  
An interdisciplinary course focusing on specific aspects of fitness including physical, mental, and emotional parameters. May include, but not limited to, physical performance, stress management, weight management, self esteem, behavior modification, and injury rehabilitation.
- PE 135 Beginning Swimming** (1,1.5)  
2 or 3 hours lecture/laboratory  
**Note:** Maximum of 4 completions in any combination of PE 135, PE 136, PE 214 (Swimming)  
**Transfer acceptability:** CSU; UC  
Basic swimming strokes with an emphasis on skill development.
- PE 136 Intermediate Swimming** (1,1.5)  
2 or 3 hours lecture/laboratory  
**Note:** May be taken 4 times; maximum of 4 completions in any combination of PE 135, PE 136, PE 214 (Swimming)  
**Transfer acceptability:** CSU; UC  
Intermediate swimming strokes, starts, and turns. Basic diving techniques, water survival, and rescue techniques. Emphasis on skill development and conditioning.
- PE 137 Water Polo** (1)  
2 hours lecture/laboratory  
**Note:** May be taken 4 times; maximum of 4 completions in any combination of PE 137, PE 170 (Water Polo), PE 214 (Water Polo)  
**Transfer acceptability:** CSU; UC  
Development of ball-handling skills, swimming conditioning, performance of offensive and defensive tactics, and game strategies.
- PE 140 Beginning Tennis** (1,1.5)  
2 or 3 hours lecture/laboratory  
**Note:** Maximum of 4 completions in any combination of PE 140, PE 141, PE 142, PE 216 (Tennis)  
**Transfer acceptability:** CSU; UC  
Introduction to basic tennis strokes, footwork, rules, and scoring.

- PE 141 Intermediate Tennis (1,1.5)**  
2 or 3 hours lecture/laboratory  
**Note:** May be taken 4 times; maximum of 4 completions in any combination of PE 140, PE 141, PE 142, PE 216 (Tennis)  
**Transfer acceptability:** CSU; UC  
Competency development in tennis strokes, defensive and offensive tactics, and match play.
- PE 142 Advanced Tennis (1,1.5)**  
2 or 3 hours lecture/laboratory  
**Note:** Maximum of 4 completions in any combination of PE 140, PE 141, PE 142, PE 216 (Tennis)  
**Transfer acceptability:** CSU; UC  
Designed primarily for competitive play with stress on court position and strategy.
- PE 150 Beginning Weight Training (1,1.5)**  
2 or 3 hours lecture/laboratory  
**Note:** Maximum of 4 completions in any combination of PE 150, PE 151  
**Transfer acceptability:** CSU; UC  
Developing basic skills, coordination, muscular tone, and strength through the use of weight machines and free weights.
- PE 151 Intermediate Weight Training (1,1.5)**  
2 or 3 hours lecture/laboratory  
**Note:** Maximum of 4 completions in any combination of PE 150, PE 151  
**Transfer acceptability:** CSU; UC  
Advanced work for toning and muscular development through the use of weights, variable resistance machines, and other weight devices.
- PE 155 Beginning Volleyball (1,1.5)**  
2 or 3 hours lecture/laboratory  
**Note:** Maximum of 4 completions in any combination of PE 155, PE 156, PE 157, PE 170 (Volleyball)  
**Transfer acceptability:** CSU; UC  
Beginning skills in volleyball including passing, setting, hitting, and serving. Drills and team play.
- PE 156 Intermediate Volleyball (1,1.5)**  
2 or 3 hours lecture/laboratory  
**Note:** May be taken 4 times; maximum of 4 completions in any combination of PE 155, PE 156, PE 157, PE 170 (Volleyball)  
**Transfer acceptability:** CSU; UC  
Advanced work on fundamentals including blocking and defense, with emphasis on team drills and team play.
- PE 157 Advanced Volleyball (1,1.5)**  
2 or 3 hours lecture/laboratory  
**Note:** Maximum of 4 completions in any combination of PE 155, PE 156, PE 157, PE 170 (Volleyball)  
**Transfer acceptability:** CSU; UC  
Advanced techniques of volleyball with emphasis on competitive play.
- PE 165 Coed Softball (1,1.5)**  
2 or 3 hours lecture/laboratory  
**Note:** Maximum of 4 completions in any combination of PE 165, PE 170 (Softball)  
**Transfer acceptability:** CSU; UC  
Basic skills of slow pitch, fast pitch, and over the line softball. Includes rules, basic skills, and play.
- PE 166 Basketball (1)**  
2 hours lecture/laboratory  
**Transfer acceptability:** CSU; UC  
**Note:** Maximum of 4 completions in any combination of PE 166, PE 170 (Basketball), PE 211  
Basic basketball skills including passing, shooting, dribbling, ball handling, and rebounding. Team play, offensive sets, and defensive patterns will be emphasized.
- PE 168 Soccer (1,1.5)**  
2 or 3 hours lecture/laboratory  
**Note:** Maximum of 4 completions in any combination of PE 168, PE 170 (Soccer)  
**Transfer acceptability:** CSU; UC  
Beginning skills in soccer. Analysis of individual positions, rules, basic drills, and team play.
- PE 170 Team Sports (1,1.5)**  
2 or 3 hours lecture/laboratory  
**Note:** May be taken 4 times; maximum of 4 completions in any combination of courses for the same sport; For Football, PE 170 (Football), PE 210; For Volleyball, PE 155, PE 156, PE 157, PE 170 (Volleyball); For Soccer, PE 168, PE 170 (Soccer); For Softball, PE 165, PE 170 (Softball); For Baseball, PE 170 (Baseball), PE 212; For Basketball, PE 166, PE 170 (Basketball), PE 211; For Wrestling, PE 170 (Wrestling), PE 215, 216 (Wrestling); For Water Polo, PE 137, PE 170 (Water Polo), PE 214 (Water Polo)  
**Transfer acceptability:** CSU; UC  
Instruction and participation in team sports for advanced players. Team sports offered include football, volleyball, soccer, softball, baseball, basketball, wrestling, and water polo. See Class Schedule for particular sport(s) offered each semester.
- PE 175A Psychology of Specific Athletic Competition – Contact (2)**  
2 hours lecture  
**Transfer acceptability:** CSU  
Psychological, mental, and physical preparation for the competitive athlete.
- PE 175B Psychology of Specific Athletic Competition – Minimal Contact (2)**  
2 hours lecture  
**Transfer acceptability:** CSU  
Psychological, mental, and physical preparation for the competitive athlete.
- PE 175C Psychology of Specific Athletic Competition – Non-Contact (2)**  
2 hours lecture  
**Transfer acceptability:** CSU  
Psychological, mental, and physical preparation for the competitive athlete.
- PE 175D Psychology of Specific Athletic Competition – Skilled (2)**  
2 hours lecture  
**Transfer acceptability:** CSU  
Psychological, mental, and physical preparation for the competitive athlete.
- PE 176 Athletic Training (3)**  
3 hours lecture  
**Transfer acceptability:** CSU; UC  
An overview of the field of sports medicine with an emphasis on the prevention, recognition, evaluation, first aid, and treatment of athletic injuries.
- PE 180 Adaptive Outdoor Activities (1,1.5)**  
2 or 3 hours lecture/laboratory  
**Note:** May be taken 4 times  
**Transfer acceptability:** CSU; UC  
Planning of, participation in, and evaluation of a variety of sports and other outdoor activities adapted to disabled students. Emphasis will be on self reliance, organization of personal belongings, problem solving situations, interpersonal relations, and meeting new challenges.
- PE 181 Adaptive Aquatics (1,1.5)**  
2 or 3 hours lecture/laboratory  
**Note:** May be taken 4 times  
**Transfer acceptability:** CSU; UC  
Basic swimming, survival strokes, and water orientation adapted to individual student's disability.

- PE 182 Adaptive Weight Training (1,1.5)**  
2 or 3 hours lecture/laboratory  
**Note:** May be taken 4 times  
**Transfer acceptability:** CSU; UC  
Resistance activities designed to meet specific needs of the student with a disability. Development and maintenance of a level of strength, flexibility, and cardiovascular endurance in order to facilitate independence of movement and rehabilitation of specific muscle groups.
- PE 183 Adaptive Skiing (1,1.5)**  
2 or 3 hours lecture/laboratory  
**Note:** May be taken 4 times  
**Transfer acceptability:** CSU; UC  
Snow skiing using adapted equipment where appropriate. Field trip to ski area required. Expenses, except for transportation, to be borne by student.
- PE 184 Adaptive Body Conditioning (1,1.5)**  
2 or 3 hours lecture/laboratory  
**Note:** May be taken 4 times  
**Transfer acceptability:** CSU; UC  
Training to increase endurance, flexibility, and strength. Emphasis on individual fitness profile.
- PE 190 Theory of Softball (2)**  
2 hours lecture  
**Transfer acceptability:** CSU; UC – PE 101, 190 and 206-225 combined: maximum credit, 8 units  
Fastpitch softball rules, playing techniques, coaching strategies, and practice organization.
- PE 197 Topics in Physical Education (.5-4)**  
Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture, laboratory, or lecture/laboratory may be scheduled by the department. Refer to Class Schedule.  
**Note:** May be taken 4 times  
**Transfer acceptability:** CSU  
Topics in Physical Education. See Class Schedule for specific topic offered. Course title will designate subject covered.
- PE 204 Off Season Sports Conditioning (1-1.5)**  
2 or 3 hours lecture/laboratory  
**Note:** May be taken 4 times; 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. Different forms of strength training, equipment and their use will be emphasized. Implementation of a sports specific agility program will be established. Out of season speed/endurance work, and skill efficiency will be enhanced through use of different fitness parameters in preparing men and women for their season of competition.
- PE 205 In Season Sports Conditioning (1,1.5)**  
2 or 3 hours lecture/laboratory  
**Note:** May be open entry/open exit; May be taken 4 times  
**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, speed/endurance work, and skill efficiency will be enhanced through use of different fitness parameters.
- PE 206 Coaching of Women's Team Sports (1,1.5,2)**  
2, 3, or 4 hours lecture/laboratory  
**Note:** May be taken 4 times  
**Transfer acceptability:** CSU; UC – PE 101, 190 and 206-225 combined: maximum credit, 8 units  
The application and development of knowledge, skills, and strategy as they apply to intercollegiate competition. Fall semester: volleyball and soccer. Spring semester: basketball and softball.
- PE 210 Professional Preparation for Football (1,1.5,2)**  
2, 3, or 4 hours lecture/laboratory  
**Note:** May be taken 4 times; maximum of 4 completions in any combination of PE 170 (Football), PE 210  
**Transfer acceptability:** CSU; UC – PE 101, 190 and 206-225 combined: maximum credit, 8 units  
Development of fundamental skills with emphasis on history, rules, styles, game strategy, current developments, preparation of teams for games and weekly practice schedules, and anticipated innovations for the future.
- PE 211 Professional Preparation for Basketball (1,1.5,2)**  
2, 3, or 4 hours lecture/laboratory  
**Note:** Maximum of 4 completions in any combination of PE 166, PE 170 (Basketball), PE 211  
**Transfer acceptability:** CSU; UC – PE 101, 190 and 206-225 combined: maximum credit, 8 units  
Development of fundamental skills with emphasis on history, rules, styles, game strategy, current developments, preparation of teams for games and weekly practice schedules, and anticipated innovations for the future.
- PE 212 Professional Preparation for Baseball (1,1.5,2)**  
2, 3, or 4 hours lecture/laboratory  
**Note:** May be taken 4 times; maximum of 4 completions in any combination of PE 170 (Baseball), PE 212  
**Transfer acceptability:** CSU; UC – PE 101, 190 and 206-225 combined: maximum credit, 8 units  
Development of fundamental skills with emphasis on history, rules, styles, game strategy, current developments, preparation of teams for games and weekly practice schedules, and anticipated innovations for the future.
- PE 214 Professional Preparation for Water Sports (1,1.5,2)**  
2, 3, or 4 hours lecture/laboratory  
**Note:** May be taken 4 times; maximum of 4 completions in any combination of courses for the same sport; For Swimming, PE 135, PE 136, PE 214 (Swimming); For Water Polo, PE 137, PE 170 (Water Polo), PE 214 (Water Polo)  
**Transfer acceptability:** CSU; UC – PE 101, 190 and 206-225 combined: maximum credit, 8 units  
Development of fundamental skills with emphasis on history, rules, styles, game strategy, current developments, preparation of teams for games, weekly practice schedules, and anticipated innovations for the future.
- PE 215 Professional Preparation for Wrestling (1,1.5,2)**  
2, 3, or 4 hours lecture/laboratory  
**Note:** May be taken 4 times; maximum of 4 completions in any combination of PE 170 (Wrestling), PE 215, PE 216 (Wrestling)  
**Transfer acceptability:** CSU; UC – PE 101, 190 and 206-225 combined: maximum credit, 8 units  
Development of fundamental skills with emphasis on history, rules, styles, game strategy, current developments, preparation of teams for games and weekly practice schedules, and anticipated innovations for the future.
- PE 216 Professional Preparations for Individual Sports (Golf, Tennis, and Wrestling) (1,2)**  
2 or 4 hours lecture/laboratory  
**Note:** May be taken 4 times; maximum of 4 completions in any combination of courses for the same sport; For Golf, PE 117, PE 118, PE 119, PE 216 (Golf); For Tennis, PE 140, PE 141, PE 142, PE 216 (Tennis); For Wrestling, PE 170 (Wrestling), PE 215, PE 216 (Wrestling)  
**Transfer acceptability:** CSU; UC – PE 101, 190 and 206-225 combined: maximum credit, 8 units  
Development of fundamental skills with emphasis on history, rules, styles, game strategy, current developments, preparation for games and matches, weekly practice schedules, and anticipated innovations for the future.
- PE 229 Lifeguarding (1.5)**  
1½ hours lecture  
**Prerequisite:** Ability to swim 500 yards continuously

**Transfer acceptability:** CSU

Follows American Red Cross curriculum lifeguard training and professional rescuer CPR. National certifications can be earned upon successful completion of two topic areas. An individual will have basic preparation for aquatic lifeguard job opportunities in California.

**PE 230 Lifeguarding and Emergency Response (3)**

3 hours lecture

**Prerequisite:** Ability to swim 500 yards continuously

**Transfer acceptability:** CSU; UC

Follows American Red Cross curriculum lifeguard training, professional rescuer CPR and emergency response. National certifications can be earned upon successful completion of all three topic areas. Prepares an individual for aquatic lifeguard job opportunities in California.

**PE 231 Water Safety Instruction (3)**

3 hours lecture

**Transfer acceptability:** CSU; UC

American Red Cross Instructor candidate training and water safety instruction. Follows the National Red Cross instructor course, learning levels of basic swim instruction, aquatic activities, and emergency rescue. National certifications can be earned by students 17 years of age or older upon successful completion of topics. Prepares an individual for teaching job opportunities at an aquatic facility.

**PE 232 Teaching Swimming (1,1.5)**

2 or 3 hours lecture/laboratory

**Transfer acceptability:** CSU; UC

Techniques for teaching swimming. Practical experience teaching beginning and intermediate swimming classes under supervision of college instructor.

**PE 295 Directed Study in Physical Education (1,2,3)**

3, 6, or 9 hours laboratory

**Prerequisite:** Approval of project or research by department chairperson/director

**Note:** May be taken 4 times

**Transfer acceptability:** CSU

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

**Physical Science (PHSC)**

Contact the Physics and Engineering Department for further information, (760) 744-1150, ext. 2505

**COURSE OFFERINGS****PHSC 100 Introduction to Physical Science (3)**

3 hours lecture

**Transfer acceptability:** CSU; UC – No credit for students with prior lecture credit in ASTR, CHEM, GEOL or PHYS

The study of selected topics from the fields of astronomy, geology, physics, chemistry, and their related sciences through lectures, films, and demonstrations. A general education course designed particularly for non science majors. For teacher training see PHSC 101.

**PHSC 100L Introduction to Physical Science Laboratory (1)**

3 hours laboratory

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

**Transfer acceptability:** CSU; UC – No credit for students with prior lab credit in ASTR, CHEM, GEOL or PHYS

The study of selected topics from the fields of astronomy, geology, physics, chemistry, and their related sciences through lab exercises. A general education course designed particularly for non-science majors. For teacher training see PHSC 101L.

**PHSC 101 Principles of Physical Science (3)**

3 hours lecture

**Transfer acceptability:** CSU

The study of selected topics from the fields of physics and chemistry and their related sciences through lectures, films, and demonstrations. A general education course designed particularly for non science majors. Especially recommended for teacher training.

**PHSC 101L Principles of Physical Science Laboratory (1)**

3 hours laboratory

**Prerequisite:** Completion of, or concurrent enrollment in, PHSC 101

**Transfer acceptability:** CSU

The study of selected topics from the fields of physics and chemistry and their related sciences through lab exercises. A general education course designed particularly for non-science majors; not open to majors in physics, chemistry, or engineering. Especially recommended for teacher training.

**Physics (PHYS)**

Contact the Physics and Engineering Department for further information, (760) 744-1150, ext. 2505

**COURSE OFFERINGS**

\*UC credit limitations:

- No credit for PHYS 101 or 102 if taken after 120, 200, or 230
- PHYS 120 and 121 combined with 200, 201, 230, 231, 232: maximum credit, one series
- PHYS 200 and 230 combined: maximum credit, one course
- PHYS 201 and 231 combined: maximum credit, one course

**PHYS 101 Introduction to Physics (4)**

3 hours lecture-3 hours laboratory

**Prerequisite:** MATH 50 or one year of high school Algebra

**Note:** Not open to students with prior credit in PHYS 100, 110, 115, 120, 125, 230, 231, and 232

**Transfer acceptability:** CSU; UC\*

An introductory survey course in classical and modern physics. Not intended for science majors.

**PHYS 102 Introduction to Physics (Lecture) (3)**

3 hours lecture

**Prerequisite:** MATH 50 or one year of high school Algebra

**Note:** Not open to students with prior credit in PHYS 101, 110, 115, 120, 125, 230, 231, and 232

**Transfer acceptability:** CSU; UC\*

An introductory survey course in classical and modern physics. Not intended for science majors.

**PHYS 120 General Physics (4)**

3 hours lecture 3 hours laboratory

**Prerequisite:** MATH 110

**Recommended preparation:** MATH 115

**Transfer acceptability:** CSU; UC\*; CAN PHYS 2; PHYS 120+121= CAN PHYS SEQ A

The fundamental principles of classical mechanics, wave motion, sound, thermodynamics, and fluids.

**PHYS 121 General Physics (4)**

3 hours lecture 3 hours laboratory

**Prerequisite:** PHYS 120

**Transfer acceptability:** CSU; UC\*; CAN PHYS 4; PHYS 120+121= CAN PHYS SEQ A

A second semester continuation of PHYS 120. The fundamental principles of optics, electricity, magnetism, and modern physics.



**PHYS 200 Fundamentals of Physics (5)**

4 hours lecture – 3 hours laboratory

**Prerequisite:** Completion of, or concurrent enrollment in, MATH 140**Note:** PHYS 200-201 series not recommended for majors in engineering, computer science or physics; PHYS 230 series recommended for majors in engineering, computer science, or physics.)**Transfer acceptability:** CSU; UC\*

A calculus-based course in classical mechanics, waves, sound, fluids and thermodynamics, with an emphasis on life science, pre-professional, and architectural fields.

**PHYS 201 Fundamentals of Physics (5)**

4 hours lecture – 3 hours laboratory

**Prerequisite:** PHYS 200**Recommended preparation:** Completion of, or concurrent enrollment in, MATH 141**Note:** PHYS 200-201 series not recommended for majors in engineering, computer science or physics; PHYS 230 series recommended for majors in engineering, computer science, or physics.)**Transfer acceptability:** CSU; UC\*

A calculus-based course in classical electromagnetism, optics and atomic physics, with an emphasis on life science, pre-professional, and architectural fields.

**PHYS 230 Principles of Physics (5)**

4 hours lecture 3 hours laboratory

**Prerequisite:** Completion of, or concurrent enrollment in, MATH 141**Recommended preparation:** PHYS 120**Transfer acceptability:** CSU; UC\*; CAN PHYS 8; PHYS 230+231 + 232=CAN PHYS SEQ B

Classical mechanics, thermodynamics and fluid dynamics. Required for students whose major field is physics, chemistry, or engineering.

**PHYS 231 Principles of Physics (5)**

4 hours lecture 3 hours laboratory

**Prerequisite:** PHYS 230 and completion of, or concurrent enrollment in, MATH 205**Recommended preparation:** PHYS 121**Transfer acceptability:** CSU; UC\*; CAN PHYS 12; PHYS 230+231 + 232=CAN PHYS SEQ B

Classical electromagnetism, electromagnetic waves, and optics. Required for students whose major field is physics, chemistry, or engineering.

**PHYS 232 Principles of Physics (4)**

3 hours lecture 3 hours laboratory

**Prerequisite:** PHYS 231 and MATH 205**Transfer acceptability:** CSU; UC\*; PHYS 230+231+232=CAN PHYS SEQ B

Modern Physics. Required for students whose major field is physics, chemistry, or engineering.

**PHYS 295 Directed Study in Physics (1,2,3)**

3, 6, or 9 hours laboratory

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

Designed for the student who has demonstrated a proficiency in physics subjects and the initiative to work independently on a particular sustained project which does not fit into the context of regularly scheduled classes.

**Physiology**

See Zoology

**Political Science (POSC)**

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

**COURSE OFFERINGS****POSC 100 Introduction to Political Science (3)**

3 hours lecture

**Transfer acceptability:** CSU; UC

Introduction to the scope and methods of political science; basic political concepts and policies; comparative government institutions, stressing the United States; an overview of political theories, international politics, and political economy.

**POSC 101 Introduction to Politics and American Political Institutions (3)**

3 hours lecture

**Note:** This course plus POSC 102 meets the State requirement in American History and Institutions.**Transfer acceptability:** CSU; UC

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 evolution of political rights and individual liberties, the electoral process and fundamental concepts of democracy, liberty, diversity, and equality.

**POSC 102 Introduction to United States and California Governments (3)**

3 hours lecture

**Note:** This course plus POSC 101 meets the State requirement in American History and Institutions.**Transfer acceptability:** CSU; UC

An examination of the 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 125 Contemporary World Problems (3)**

3 hours lecture

**Transfer acceptability:** CSU; UC

Focus is on three issue-areas: war and group conflict; population growth and movement; and change and cultural values. Other current issues may also be examined.

**POSC 130 Introduction to Public Administration (3)**

3 hours lecture

**Transfer acceptability:** CSU; UC

A survey of the key issues in public administration, urban planning, public personnel administration, and public safety with an emphasis on governmental structure and the public decision making process as it pertains to the effectiveness of criminal justice policies, zoning, and land use considerations.

**POSC 197 Political Science Topics (.5-4)**  
 Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture, laboratory, or lecture/laboratory may be scheduled by the department. Refer to Class Schedule.  
**Note:** May be taken 4 times  
**Transfer acceptability:** CSU; UC – Credit determined by UC upon review of course syllabus.  
 Topics in Political Science. See Class Schedule for specific topic offered. Course title will designate subject covered.

**POSC 295 Directed Study in Political Science (1,2,3)**  
 3, 6 or 9 hours laboratory  
**Prerequisite:** Approval of project or research by department chairperson  
**Note:** May be taken 4 times  
**Transfer acceptability:** CSU; UC – Credit determined by UC upon review of course syllabus.  
 Independent study designed for advanced students who have demonstrated a proficiency in political science subjects and have the initiative to work independently on projects or research that does not fit into the context of regularly scheduled classes. Students will work under the personal supervision of an instructor.

## Psychology (PSYC)

Contact the Behavioral Sciences Department for further information, (760) 744-1150, ext. 2329. For transfer information, consult a Palomar College counselor.

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

### PROGRAM OF STUDY

#### Psychological and Social Services

Provides the student with the academic training and hands on experience for entry-level employment in human services and serves as preparation for upper division course work.

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

Program Requirements	Units
COUN 100 Introduction to Basic Counseling Skills	3
PSYC 100 Introduction to Psychology	3
PSYC/SOC/ AODS 140 Intro to Psychological and Social Services	4
PSYC 225 Psychology of Abnormal Behavior	3
PSYC 235 Learning/Behavior Modification	3
PSYC/SOC/ AODS 298 Directed Field Experience I	5
SOC 100 Introduction to Sociology	3
SOC 110 Social Problems	3
<b>Electives (Select 3 units)</b>	
PSYC/SOC 105 Marriage, Family and Intimate Relationships	3
PSYC 110 Developmental Psychology – Child/Adult	3
PSYC 115 Psychology of Personal Growth	3
PSYC/SOC 120 Social Psychology	3
PSYC/SOC 145 Psychology and Sociology of Aging	3
PSYC/SOC/ AODS 155 Physiology/Pharmacology of Psychoactive Drugs	3
<b>TOTAL UNITS</b>	<b>30</b>

Completion of additional psychology or sociology courses in alcohol/drug studies prepares students for eligibility to take California state examinations to become certified addictions treatment specialists by CAADE and certified alcoholism and drug abuse counselors by CAADAC.

#### Alcohol/Drug Courses Required for Eligibility for State Examinations

PSYC 100 Introduction to Psychology	3
PSYC 225 Psychology of Abnormal Behavior	3
SOC 100 Introduction Sociology	3
PSYC/SOC/ AODS 140 Intro to Psychological and Social Services	4
PSYC/SOC/ AODS 150 Intro to Chemical Dependency	3
PSYC/SOC/ AODS 155 Physiology/Pharmacology of Psychoactive Drugs	3
PSYC/SOC/ AODS 160 Prevention, Intervention, and Education	3
PSYC/SOC/ AODS 250 Group Leadership and Process	3
PSYC/SOC/ AODS 255 Treatment Modalities, Law and Ethics	3
PSYC/SOC/ AODS 260 Chemical Dependency Family Counseling	3
PSYC/SOC/ AODS 298 Directed Field Experience I	5
PSYC/SOC/ AODS 299 Directed Field Experience II	6

### COURSE OFFERINGS

**PSYC 100 Introduction to Psychology (3)**  
 3 hours lecture

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

A general introduction to the principles of human and animal behavior. Topics covered include history of psychology, research thinking, intelligence, lifespan development, gender and human sexuality, motivation and emotion, health psychology, personality, psychological disorders, therapy, social psychology, and other related topics (e.g., industrial/organizational psychology, sports psychology, environmental psychology, forensic psychology). Emphasis is placed upon the relationship between general principles of psychology and their practical applications.

**PSYC 105 Marriage, Family, and Intimate Relationships (3)**  
 3 hours lecture

**Note:** Cross listed as SOC 105

**Transfer acceptability:** CSU, UC

A study of the psychology and sociology of the family and intimate relationships. Emphasizes factors that enhance interpersonal relationships. Topics include love, marital choice, communication, conflict, and changing models of the family. Examines cross-cultural and historical factors that impact the family as a social institution and the impact of gender, race and ethnicity, social class, age, and sexual orientation on family organization.

**PSYC 110 Developmental Psychology – Child Through Adult (3)**  
 3 hours lecture

**Transfer acceptability:** CSU; UC

A chronological study of human growth and development throughout the lifespan. Heredity and environmental determinants of behavior and developmental research methods are emphasized. The importance of social experience in the family, school, peer groups, and society are examined.

**PSYC 115 The Psychology of Personal Growth and Development (3)**  
 3 hours lecture

**Transfer acceptability:** CSU

Emphasis on self understanding through the study of the individual and relationships which contribute to unique personal development; application of the fundamental concepts of psychology which aid in examining one's own personal environment and the interaction with that environment.

- PSYC 120 Social Psychology (3)**  
3 hours lecture  
**Note:** Cross listed as SOC 120  
**Transfer acceptability:** CSU; UC  
Explores relationships between the behavior of individuals and the structure of society. Emphasizes the importance of language, roles, and the concepts of the self in the socialization process.
- PSYC 125 Human Sexuality (3)**  
3 hours lecture  
**Note:** Cross listed as SOC 125  
**Transfer acceptability:** CSU; UC  
Survey of topics pertinent to an understanding of the development of human sexuality. Emphasis on biological, psychological, and cultural determinants of sexual behavior. Current sex norms and various aspects of interpersonal and individual sexual adjustment.
- PSYC 130 Psychology of Women (3)**  
3 hours lecture  
**Transfer acceptability:** CSU; UC  
A psychological exploration of the ways that race, ethnicity, class, sexual orientation, and age modify women's experience. To be included are such areas as communication, mental health, sex-role socialization, body image, family, and sexuality issues. Course content will be relevant to both females and males.
- PSYC 140 Introduction to Psychological and Social Services (4)**  
3 hours lecture 3 hours laboratory  
**Note:** Cross listed as SOC 140/AODS 140  
**Transfer acceptability:** CSU  
An overview of the theoretical basis of counseling skills, including social work, psychodynamic, behavioral, and client-centered approaches. The roles of psychologists, sociologists, social workers, family therapists, and therapeutic support providers are compared and contrasted, and the issues they deal with are described. This course provides students with an opportunity to observe actual practices of human services providers working as interdisciplinary team members in an agency setting. 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 Chemical Dependency (3)**  
3 hours lecture  
**Note:** Cross listed as SOC 150/AODS 150  
This basic course will provide a historical perspective on alcohol and other psychoactive drug abuse and its impact on the community. An interdisciplinary approach will be used. Topics will include definitions, sociocultural factors related to use and/or abuse, identification of issues and models of dependency and recovery, and analysis of the effectiveness of policies and programs.
- PSYC 155 The Physiology and Pharmacology of Psychoactive Drugs (3)**  
3 hours lecture  
**Note:** Cross listed as SOC 155/AODS 155  
This course will examine how psychoactive drugs affect the nervous system. Ways of classifying drugs will be identified including the processes of physical and psychological dependence, tolerance, withdrawal, and genetic predispositions. Temporary and 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  
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  
**Note:** May be taken 2 times  
**Transfer acceptability:** CSU; UC – Credit determined by UC upon review of course syllabus.  
Current topics of special interest to psychology students will be debated and discussed in a seminar format. Issues in such areas as social psychology, perception and learning, personality, and others will be analyzed from theoretical and methodological perspectives. Content will change from semester to semester.
- PSYC 205 Statistics for the Behavioral Sciences (3)**  
3 hours lecture  
**Prerequisite:** A minimum grade of 'C' in MATH 56 or 60 or eligibility determined through the math placement process  
**Note:** Cross listed as SOC 205  
**Transfer acceptability:** CSU; UC - PSYC/SOC 205, MATH 120, and BIOL 215 combined: maximum credit, one course; CAN PSY 6  
Quantitative methods as applied to behavioral science data. Frequency distributions, measure of central tendency, variability, theory of error, measures of significance, correlation, regression, and an introduction to analysis of variance. Also included is an introduction to the use of computers in statistics.
- PSYC 205L Data Analysis in Psychology and Sociology (1)**  
3 hours laboratory  
**Corequisite:** PSYC/SOC 205  
**Note:** Cross listed as SOC 205L  
**Transfer acceptability:** CSU; UC  
Use of the computer as a tool for calculating statistics and exploring data in Psychology and Sociology.
- PSYC 210 Physiological Psychology (4)**  
3 hours lecture 3 hours laboratory  
**Prerequisite:** PSYC 100  
**Transfer acceptability:** CSU; UC; CAN PSY 10  
An examination of the biological basis of behavior. Topics to be covered include neuroanatomy, neurophysiology, psychoactive drug use and addiction, endocrinology, encephalic evolution, learning and memory, sexual behavior, sleep processes and neuropsychological disorders. Laboratory includes neuroanatomical dissection.
- PSYC 225 Psychology of Abnormal Behavior (3)**  
3 hours lecture  
**Prerequisite:** PSYC 100  
**Transfer acceptability:** CSU; UC  
Identification and description of the various types of psychological abnormalities, deficiencies, and disorders which may interfere with a human individual's ability to cope with the demands of the surroundings. All of the major psychiatric categories will be covered as well as the types of personality problems which lead to domestic, social, and economic inadequacies, and in some instances, to difficulties with the law.
- PSYC 230 Research Methods in Psychology (4)**  
3 hours lecture 3 hours laboratory  
**Prerequisite:** PSYC 100, PSYC/SOC 205, ENG 100  
**Transfer acceptability:** CSU; UC  
Introduction to psychological research methods with emphasis on the use of the scientific method in psychological research. The laboratory is designed to complement the lectures and allow each student to design and conduct psychological research.

**PSYC 235 Principles of Learning and Behavior Modification (3)**

3 hours lecture

**Transfer acceptability:** CSU; UC

The basic principles and research in classical conditioning, operant conditioning, cognitive learning processes, the impact of biochemical processes on learning, and application of behavior modification techniques for changing behavior.

**PSYC 250 Group Leadership and Process (3)**

3 hours lecture

**Note:** Cross listed as AODS 250/SOC 250

An introduction to the dynamics of group interaction, with emphasis upon the individual's firsthand experience as the group studies itself under supervision. 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 Treatment Modalities, Law and Ethics (3)**

3 hours lecture

**Note:** Cross listed as AODS 255/SOC 255

This course reviews the principles and practices of addiction treatment including screening, intake, orientation, assessment, treatment planning, counseling, case management, crisis intervention, education of clients and their families, referral, report and record keeping, and consultation. Legal and ethical standards of practice for addictions counselors will be reviewed and included in this body of knowledge, skills, and attitudes.

**PSYC 260 Chemical Dependency Family Counseling (3)**

3 hours lecture

**Note:** Cross listed as AODS 260/SOC 260

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 296 Special Problems in Psychology (1,2,3)**

1, 2, or 3 hours lecture

**Note:** May be taken 4 times

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

An individualized or group project in psychology of any nature approved by, and under the personal supervision of, the instructor.

**PSYC 298 Directed Field Experience I (5)**

3 hours lecture 6 hours laboratory

**Note:** Cross listed as AODS 298/SOC 298

**Transfer acceptability:** CSU

Principles of interpersonal conflict dynamics and approaches for conflict resolution are analyzed. Non-directive, directive and behavior modification skills that are used to increase motivation for positive behavioral change are compared and evaluated. Field placement provides students with an opportunity to observe human services providers dealing with conflict in agency settings using structured and informal conflict resolution approaches. Interns are also provided with opportunities to practice conflict resolution techniques and skills for increasing motivation for positive change.

**PSYC 299 Directed Field Experience II (6)**

3 hours lecture 9 hours laboratory

**Note:** Cross listed as AODS 299/SOC 299

This course emphasizes advanced concepts in chemical dependency. The functions and consequences of denial and ambivalence are explored in depth, and students refine their skills for the 12 core functions of effective clinical practice. They prepare for the oral California certifying examinations and for entry level positions as alcohol and drug counselors. Students practice these skills in class and under the supervision of agency personnel.

**Public Administration (PA)**

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

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

**PROGRAM OF STUDY**

**Public Administration**

This certificate program is designed for transfer into San Diego State University's program leading to a degree in Public Administration.

Assists in improving skills to take management positions and/or meet professional growth requirements in local government. Transfer students should consult the four year college or university catalog for specific requirements or see a Palomar College counselor.

In order to earn a certificate, students must achieve a minimum grade of 'C' in each of the certificate program courses.

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

Program Requirements		Units
ACCT 103	Financial Accounting	4
BUS 205	Business Writing	3
ECON 102	Principles of Economics (Micro)	3
MATH 120	Elementary Statistics	3
POSC 101	Intro to Politics/American Political Institutions	3
POSC 102	Intro to United States/California Governments	3
POSC 130	Introduction to Public Administration	3
<b>TOTAL UNITS</b>		<b>22</b>

**Public Works Management (PWM)**

Contact Occupational & Noncredit Programs for further information, (760) 744-1150, ext. 2284

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

**PROGRAM OF STUDY**

**Public Works Management**

Specifically designed for individuals employed by or seeking employment in public works organizations in San Diego County.

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

Program Requirements		Units
PWM 50	Introduction to Public Works	3
PWM 51	Road Construction and Maintenance	3
PWM 52	Asphalt and Portland Cement	3
PWM 53	Public Works Inspection I	3
PWM 54	Public Works Inspection II	3
PWM 55	Public Works Administration	3
PWM 56	Parks and Landscape Management	3
PWM/WTE/ WWT 125	Supervision	3
PWM 220/		

WWT 220	Discharge Compliance Fundamentals	3
BUS 125	Business English	3
CSIS 120/ R CSIS 120	Microcomputer Applications	3
<b>TOTAL UNITS</b>		<b>33</b>

**COURSE OFFERINGS**

Courses numbered under 100 are not intended for transfer credit.

**PWM 50 Introduction to Public Works (3)**

3 hours lecture

Designed by the American Public Works and Maintenance Superintendents Associations in order to prepare public works and maintenance workers for lead and supervisory positions. Students will receive an introduction to techniques; materials and equipment used in public works, maintenance and repair projects.

**PWM 51 Road Construction and Maintenance (3)**

3 hours lecture

**Recommended preparation:** MATH 15

Provides instruction on street construction and maintenance; including materials and methods, specifications, records and cost accounting systems, revenue sources and budget preparation. Other subjects include safety, drainage, equipment records and specifications, as well as public relations. Codes and industry standards that pertain to improvements and repair will be reviewed.

**PWM 52 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 I (3)**

3 hours lecture

**Recommended preparation:** MATH 15

Provides an overview of the inspector's role and responsibilities as it relates to a project. The student will be given the necessary information and training necessary for entry level inspection responsibilities. The course will apply to construction of municipal infrastructure and civil engineering type projects.

**PWM 54 Public Works Inspection II (3)**

3 hours lecture

**Recommended preparation:** MATH 15

Provides detailed instruction on more complex inspection tasks associated with public works construction. Topics include specific inspection methods for traffic signal installations, inspection techniques for street lighting system installations, inspection of street striping and markings, inspection of pipe rehabilitation systems, and inspection and construction methods of modified asphalts, pavements, and processes. Advanced material quantity estimating and technical report writing will be emphasized.

**PWM 55 Public Works Administration (3)**

3 hours lecture

Provides an introduction to the organizational concepts used by the Public Works Department. Content includes typical organization, management concepts, political considerations, planning, financial management and public relations.

**PWM 56 Parks and Landscape Management (3)**

2 1/2 hours lecture-1 1/2 hours laboratory

Survey of parks and landscape management, operations, and maintenance techniques in various parks and landscapes. Content will include the principles of parks and landscape management, design, construction, maintenance and operations, public parks, landscape management and administration principles. Specific topics will include turf, landscape, park equipment, pesticide use, park facilities,

trails design and construction, irrigation system design and maintenance, installation, and maintenance practices for basic elements of landscape irrigation systems, and playground design and maintenance.

**PWM 125 Supervision (3)**

3 hours lecture

**Note:** Cross listed as WTE/WWT 125

Managerial aspects of public utilities including organization, decision making, coordination, communication, and public relations. Personnel management including recruiting, training, evaluation, discipline, promotion, morale, and grievances. Safety programs and encouraging safe conditions, actions and attitudes.

**PWM 220 Discharge Compliance Fundamentals (3)**

2 1/2 hours lecture-1 1/2 hours laboratory

**Note:** Cross listed as WWT 220

Study of regulatory discharge compliance fundamentals of the Regional Water Quality Control Board point source and non-point source permitting process. Course study includes collection systems, storm water, and recycled water permit and reporting compliance.

**Radio and Television (RTV)**

See also Communications

Contact the Communications Department for further information, (760) 744-1150, ext. 2440

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

**PROGRAMS OF STUDY**

**Digital Media**

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

**CERTIFICATE OF PROFICIENCY**

Program Requirements	Units
CINE/RTV 125 or Beg Film/Video Field Production	
GC/R GC 140 Digital Imaging/Photoshop I	3
RTV 270 Computer Video Editing	3
GC 204 Motion Graphics for Multimedia-A	3
GC 207 Motion Graphics for Multimedia-B	3
RTV 275 Avid Editing for Television & Film	3

**TOTAL UNITS 15**

Digital Media Certificate of Achievement is also listed under Graphic Communications.

**Digital Video**

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

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

Program Requirements	Units
GC/R GC 140 Digital Imaging/PhotoShop I	3
GC 165 Digital Video Design	3
GC 204 Motion Graphics for Multimedia-A	3
GC 207 Motion Graphics for Multimedia-B	3

RTV/CINE 125	Beg Film/Video Field Production	3
RTV 230	Digital Audio with Pro Tools	3
RTV 270	Digital Video Editing	3
RTV 275	Avid Editing for Television and Film	3

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

Digital Video A.A. Degree Major or Certificate of Achievement is also listed under Graphic Communications.

## Radio and Television

Provides entry level skills in the field of radio and television broadcasting.

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

<b>Program Requirements</b>		<b>Units</b>
RTV 100	Introduction to Radio and TV	3
RTV 110	Broadcast Writing and Producing	3
RTV 240	Television News	4
ENTT/TA 107	Lighting for Stage and Television	3
ENTT/		
RTV 294B or	Television Internship/Production	
RTV 294A	Radio Programming Projects	1
ENTT/RTV 120	Basic Television Production	3
CINE /RTV 125	Beg Film/Video Field Production	3
ENTT/RTV 130	Radio Production	3
RTV 160	Broadcast Advertising	3
RTV 220 or	TV Production and Direction	
RTV 230*	Digital Audio with Pro Tools	3
CINE/RTV 225	Intermediate Film/Video Field Production	3

### Electives (Select 6 units, maximum 6 units from RTV 194A, 194B, 294A, and 294B)

RTV 100L	Introduction to Radio and Television Lab.	1
RTV/CINE 115	Creative Writing for TV/Cinema	3
RTV 135	Beginning Radio Station Operations	1,2,3
RTV 136	Advanced Radio Station Operations	1,2,3
RTV 140	Radio News	3
RTV 150	Performance/Acting for Broadcast/Film	3
RTV 170	Introduction to Video Editing	3
RTV 194A	Radio Operations	1,2,3
RTV 194B	Exp Topics/TV Operations	1,2,3
RTV 230	Digital Audio with Pro Tools	3
RTV 270	Digital Video Editing	3
RTV 275	Avid Editing for Television and Film	3
RTV 294A	Radio Programming Projects	1,2,3
RTV/ENTT 103	Introduction to Audio-Visual Systems	3
RTV/ENTT 294B	Television Internships/Production	1,2,3
TA/ENTT 108	Stagecraft and Scene Design for Theatre and Television	3
<b>TOTAL UNITS</b>		<b>38</b>

\* Students who are not planning to transfer to four-year university and who have a radio emphasis may substitute RTV 230 for RTV 220.

## COURSE OFFERINGS

Courses numbered under 100 are not intended for transfer credit.

### RTV 50 Basic Television Acting (1)

3 hours laboratory

**Note:** May be taken 3 times

Practice and performance in the basics of television acting. Special emphasis on movement for the camera, emotion, gestures, voice, techniques to copy interpretation, audition processes, agent and industry information. Prepares the actor for basic television acting through a variety of on-camera exercises and final productions.

### RTV 100 Introduction to Radio and TV (3)

3 hours lecture

**Transfer acceptability:** CSU

A survey of American broadcasting, its development, impact and influence on our society; basic principles, mass communication theory, station operation programming, advertising, rating services, cable television, regulation, and censorship; in depth analysis of current issues and developments.

### RTV 100L Introduction to Radio and Television Laboratory (1)

3 hours laboratory

**Transfer acceptability:** CSU

Practice in use of radio and television studio equipment. Designed for students who are not Radio Television majors.

### RTV 103 Introduction to Audio-Visual Systems (3)

6 hours lecture/laboratory

**Note:** Cross listed as ENTT 103

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

### RTV 110 Broadcast Writing and Producing (3)

6 hours lecture/laboratory

**Transfer acceptability:** CSU

Creating and developing ideas and materials for broadcast. Problems of timing, pacing, visualization, and expression. Techniques of scripting for radio and television.

### RTV 115 Creative Writing for Television and Cinema (3)

3 hours lecture

**Note:** Cross listed as CINE 115

**Transfer acceptability:** CSU

Instruction and practice in the art of dramatic script writing. Emphasis is placed on the development of the initial story idea into a viable, professional shooting script for television or film.

### RTV 120 Basic Television Production (3)

6 hours lecture/laboratory

**Note:** Cross listed as ENTT 120

**Transfer acceptability:** CSU

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

### RTV 124 Staging and Lighting for Television (3)

6 hours lecture/laboratory

**Transfer acceptability:** CSU

A study of the aesthetic considerations and technical practices in sets and graphics design, staging, and lighting for television and film.

- RTV 125 Beginning Film and Video Field Production (3)**  
*6 hours lecture/laboratory*  
**Note:** Cross listed as CINE 125  
**Transfer acceptability:** CSU; UC – CINE/RTV 125 and 225 combined: maximum credit, one course  
 A study of the basic techniques of field production using Super 8 or 16mm film or analog or digital video equipment as applied to various cinematic forms. The student will work with a team on a project through the preproduction, shooting, and postproduction phases of storytelling for the screen.
- RTV 130 Radio Production (3)**  
*6 hours lecture/laboratory*  
**Note:** Cross listed as ENTT 130  
**Transfer acceptability:** CSU  
 Techniques and theories of audio production in the preparation of radio programs. Use of audio mixing and recording equipment, editing and dubbing, microphone techniques and program construction. Several programs produced by the student will be broadcast on radio station KKSM.
- RTV 135 Beginning Radio Station Operations (1,2,3)**  
*3, 6, or 9 hours laboratory*  
**Prerequisite:** RTV/ENTT 130  
**Corequisite:** RTV 294A  
**Note:** May be taken 4 times  
**Transfer acceptability:** CSU  
 Introduction to radio station operations and audio production skills along with practical exercises using broadcast equipment and techniques.
- RTV 136 Advanced Radio Station Operations (1,2,3)**  
*3, 6, or 9 hours laboratory*  
**Prerequisite:** RTV 130/ENTT 130  
**Corequisite:** RTV 294A  
**Note:** May be taken 4 times  
**Transfer acceptability:** CSU  
 Advanced radio and audio production skills along with practical exercises using broadcast equipment and techniques. Special emphasis in broadcast management training.
- RTV 140 Radio News (3)**  
*6 hours lecture/laboratory*  
**Transfer acceptability:** CSU  
 Introduction to the principles of radio news writing, rewriting, editing, gathering (by audio recording and news wire services), and announcing. Student will incorporate learning into the production of radio newscasts for radio station KKSM.
- RTV 150 Performance and Acting for Broadcast and Film (3)**  
*6 hours lecture/laboratory*  
**Transfer acceptability:** CSU  
 Techniques of preparation and delivery of materials before microphone and camera.
- RTV 160 Broadcast Advertising (3)**  
*6 hours lecture/laboratory*  
**Note:** May be taken 4 times  
**Transfer acceptability:** CSU  
 Role and practice of broadcast advertising including marketing and media research, time purchasing, and advertising message design and production.
- RTV 170 Introduction to Video Editing (3)**  
*6 hours lecture/laboratory*  
**Transfer acceptability:** CSU  
 Covers the technical and theoretical development of film and video editing from its initiation to the present day. Provides an introduction to the basic elements of editing language, the various technical processes used throughout its history, as well as the related skills necessary for good editing.
- RTV 194A Radio Operations (1,2,3)**  
*3, 6, or 9 hours laboratory*  
**Note:** Credit/No Credit grading only; may be taken 4 times  
**Transfer acceptability:** CSU  
 Advanced research projects designed to meet the specific needs of student's interest in radio station operations. Projects may be chosen for production by the College or by the individual student.
- RTV 194B Experimental Topics Television Operations (1,2,3)**  
*3, 6, or 9 hours laboratory*  
**Note:** May be taken 4 times  
**Transfer acceptability:** CSU  
 Individual television projects, including operations of television equipment in college produced television programs or individual productions.
- RTV 197 Radio and Television Topics (.5-4)**  
 Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture, laboratory, or lecture/laboratory may be scheduled by the department. Refer to Class Schedule.  
**Note:** May be taken 4 times  
**Transfer acceptability:** CSU  
 Topics in Radio and Television. See Class Schedule for specific topic offered. Course title will designate subject covered.
- RTV 220 Television Production and Direction (3)**  
*6 hours lecture/laboratory*  
**Prerequisite:** RTV 110 and RTV 120/ENTT 120  
**Transfer acceptability:** CSU  
 Techniques and theories of television production and direction. Practice in pre production planning, staging, studio production, and editing. Duties and responsibilities of director and production crew. Production of fully scripted television programs for airing on cable and broadcast stations.
- RTV 225 Intermediate Film and Video Field Production (3)**  
*6 hours lecture/laboratory*  
**Prerequisite:** A minimum grade of 'C' in RTV 110 and CINE/RTV 125  
**Note:** Cross listed as CINE 225  
**Transfer acceptability:** CSU; UC – CINE/RTV 125 and 225 combined: maximum credit, one course  
 Principles, techniques, and theory of field production using digital or analog video or 16mm film equipment. Theory and practice of off line linear or nonlinear editing.
- RTV 230 Digital Audio with Pro Tools (3)**  
*6 hours lecture/laboratory*  
**Prerequisite:** RTV 130/ENTT 130  
**Transfer acceptability:** CSU  
 Principles and techniques of editing radio, television, and film audio projects using Pro Tools software and technology. Digitizing audio source material, working knowledge of Pro Tools interface, use of multi-track audio editing system, mic and recording techniques.
- RTV 240 Television News (4)**  
*8 hours lecture/laboratory*  
**Prerequisite:** RTV 110 and RTV 120/ENTT 120 or RTV 140  
**Note:** May be taken 4 times  
**Transfer acceptability:** CSU  
 Principles of scripting, gathering, and editing of television news. Production of newscasts for airing on cable television.
- RTV 270 Digital Video Editing (3)**  
*6 hours lecture/laboratory*  
**Prerequisite:** RTV 120/ENTT 120 and RTV 170  
**Transfer acceptability:** CSU  
 Principles and techniques of digital non-linear video editing. Overview of various software programs for editing, graphics and 3D animation. Application of operational and aesthetic editing principles to specific editing projects.

**RTV 275 Avid Editing for Television and Film (3)**  
 6 hours lecture/laboratory  
**Prerequisite:** RTV 170 and 270  
**Transfer acceptability:** CSU  
 Principles and techniques of editing video and film projects using Avid technology. Digitizing source material, storyboarding, timeline, audio editing, importing and exporting graphics, outputting, and media management.

**RTV 294A Radio Programming Projects (1,2,3)**  
 3, 6, or 9 hours laboratory  
**Note:** Credit/No Credit grading only; may be taken 4 times  
**Transfer acceptability:** CSU  
 Advanced radio projects to meet the specific needs of the student's interest in radio programming. Work on college produced broadcast productions.

**RTV 294B Television Internships/Production (1,2,3)**  
 3, 6, or 9 hours laboratory  
**Note:** Cross listed as ENTT 294B; may be taken 4 times  
**Transfer acceptability:** CSU  
 Work on advanced television production including individual research, work on college produced programs, or internships at local broadcast stations, cable companies, and other communications facilities.

## Reading (READ)

Contact Reading Services for further information, (760) 744-1150, ext. 2568

### COURSE OFFERINGS

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

**READ 5 Corrective Learning and Reading Skills/Learning Disabled (3)**  
 2 hours lecture 3 hours laboratory  
**Note:** Credit/No Credit grading only; may be taken 4 times  
 Individualized program for students who have specific learning disabilities. Intensive training in communication skills of reading, listening, and speaking.

**READ 10 Spelling (1)**  
 1 hour lecture  
**Note:** May be taken 2 times  
 Provides necessary skills to increase spelling ability through an introduction to phonetics and the rules of orthography.

**READ 11 Spelling II (1)**  
 1 hour lecture  
**Note:** May be taken 2 times  
 An intensive study and application of techniques necessary to improve college level spelling ability.

**READ 30 Fundamental Reading Skills (2)**  
 4 hours lecture/laboratory  
**Note:** Open Entry/Open Exit; Credit/No Credit grading only; may be taken 3 times  
 An individualized computer assisted instruction program based on in depth testing, assessment, prescription and instruction for the improvement of students' reading comprehension. Emphasis is placed on reading skills and their application to college and life skills materials.

**READ 47 Reading Topics (.5-4)**  
 Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture, laboratory, or lecture/laboratory may be scheduled by the department. Refer to Class Schedule.  
**Note:** May be taken 4 times)  
 Topics in Reading. See class schedule for specific topic covered. Course title will designate subject covered.

**READ 50 Reading Improvement (4)**  
 3 hours lecture 3 hours laboratory  
**Note:** May be taken 3 times  
 A course designed to improve reading skills. Individual reading problems are diagnosed and improved through a variety of instructional materials and reading techniques. For students who need to remedy difficulties with reading comprehension, vocabulary, and fluency.

**READ 110 Power Reading (4)**  
 3 hours lecture 3 hours laboratory  
**Transfer acceptability:** CSU  
 Intended for students with reading competencies who wish to enhance their reading ability by increasing reading speed, comprehension, fluency, vocabulary, and critical analysis. For students who do not have reading comprehension and vocabulary difficulties.

**READ 115 Vocabulary Enhancement (2)**  
 2 hours lecture  
**Transfer acceptability:** CSU  
 Provides techniques to increase the precision and scope of language for everyday use. Emphasis is on the development of all aspects of college level vocabulary.

**READ 120 Critical Reading (3)**  
 3 hours lecture  
**Recommended preparation:** READ 110  
**Transfer acceptability:** CSU  
 Conceptual examination and application of critical reading, critical thinking, analysis and logical reasoning in multi-discipline and multi-cultural academic sources. Emphasis on advanced critical reading, logical reasoning/thinking, reflective judgment, and problem-solving skills that will lead to the ability to interpret, analyze, critically evaluate, and advocate ideas.

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

## Real Estate (RE)

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

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

### PROGRAMS OF STUDY

#### Escrow

Prepares students for employment as escrow officers.

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

Program Requirements	Units
RE 100 Real Estate Principles	3
RE 105 Real Estate Finance	3
RE 120 Legal Aspects of Real Estate	3
RE 155 Escrow and the Title Procedures	3
RE 156 Advanced Escrow Procedures	3
RE 157 Escrow Problems	3



**Electives (Select 2 courses, 5 7 units)**

ACCT 103 and	Financial Accounting	
ACCT 104 or	Accounting Spreadsheet Lab	
BUS 105	Bookkeeping Fundamentals	3,5
BUS 110	Business Mathematics	3
BUS 115 or	Business Law	
BUS 116	Business Law	3
BUS 205	Business Writing	3
BMGT 110	Human Resource Management	3
OIS 102	Intermediate Keyboarding	3
RE 110	Real Estate Appraisal	3
RE 115	Real Estate Practice	3
RE 130	Real Estate Economics	3
RE 135	Real Estate Investments	3
RE 145	Real Estate Exchanges	3
RE 150	Real Estate Income Taxation	2
RE 158	Current Trends in Escrow	3
CE 100*	Cooperative Education	2,3,4

**TOTAL UNITS 23 25**

\* Applicable for C.E.A.'s Educational Achievement Award for full time students only. Completion of this certificate also qualifies students for the California Escrow Association's Educational Achievement Award.

**Real Estate Appraisal License Preparation**

A Real Estate Appraiser Trainee license is required of individuals who are to be employed as appraisers under the control and supervision of licensed or certified real estate appraisers. A license may be obtained by a person who does not immediately intend to be employed by an appraiser. However, no real estate appraisal activity may be performed unless the trainee is in the employ of a licensed or certified real estate appraiser.

Minimum Requirements to qualify to take the Real Estate Salesperson examination:

1. Age – 18 years of age or older.
2. Residence – Must be a legal resident of California.
3. Honesty – License applicants must be honest and truthful.
4. Education – Applicants for the Trainee or Residential license must provide evidence of successful completion of 90 hours of real estate appraisal education, including 15 hours of USPAP (Uniform Standards of Professional Appraisal Practice). Applicants for the Certified Residential license must provide proof of completion of 120 hours of real estate appraisal education (including 15 hours of USPAP). Applicants for the Certified General license must provide evidence of successful completion of 18 hours of real estate education (including 15 hours of USPAP).
5. Experience – No experience is required before obtaining the Real Estate Appraiser Trainee license. 2,000 hours of appraisal experience is required before obtaining the residential license. 2,500 hours of experience is required before obtaining the Certified Residential license. 3,000 hours of experience is required before obtaining the Certified General license.

This program is designed to meet the educational requirements of all four licensing levels of the Office of Real Estate Appraisers. **Note:** Licensed real estate brokers may satisfy 1,000 hours of the experience requirement.

**CERTIFICATE OF PROFICIENCY**

Program Requirements	Units
RE 100 Real Estate Principles	3
RE 110 Real Estate Appraisal	3
RE 111 Advanced Real Estate Appraisal	3
RE 112 Business Appraisal	3

**TOTAL UNITS 12**

Effective January 1, 2008, requirements to become a licensed or certified appraiser

will change significantly. All Initial License applications and Upgrade Applications received on or after January 1, 2008, will be required to meet the new education, experience, and examination requirements, as summarized below. Exams taken after January 1, 2008, will be based on the new 2008 criteria.

Initial or Upgrade applications received on or before December 31, 2007, will be reviewed based on current licensing requirements. To test under current requirements, submit an application before September 1, 2007.

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**

Preparation requirements for the Real Estate Broker Examination:

1. One of the following:  
 Minimum of two years full-time licensed real estate salesperson experience within the last five years or the equivalent is required (part-time – 4 years)  
 OR  
 Four year degree  
 OR  
 Member of the bar of any state in the United States (which will also exempt you from the course requirements)
2. Complete the courses listed below:

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

Program Requirements	Units	
ACCT 103 and	Financial Accounting	4
ACCT 104	Accounting Spreadsheet Lab	1
RE 105	Real Estate Finance	3
RE 110	Real Estate Appraisal	3
RE 115	Real Estate Practice	3
RE 120	Legal Aspects of Real Estate	3
RE 130 or	Real Estate Economics	3

**Electives (Select \*6 or 9 units)**  
**\*If ACCT 103, 104, and RE 130 are all three completed, only 6 units are required from the electives below:**

BUS 115	Business Law	3
BUS 116	Business Law	3
RE 100	Real Estate Principles	3
RE 111	Advanced Real Estate Appraisal	3

RE 140	Introduction to Property Management	3
RE 155	Escrow and the Title Procedures	3
RE 156	Advanced Escrow Procedures	3

**TOTAL UNITS** **24 - 26**

### Real Estate Salesperson License Preparation

A Real Estate Salesperson license is required of individuals who are to be employed as salespersons under the control and supervision of a licensed real estate broker. A license may be obtained by a person who does not immediately intend to be employed by a broker. However, no real estate activity may be performed unless the licensee is in the employ of a licensed broker.

Minimum Requirements to qualify to take the Real Estate Salesperson examination:

1. Age – 18 years of age or older.
2. Residence – Must be a legal resident of California.
3. Honesty – License applicants must be honest and truthful.
4. Education – Applicants must provide evidence of successful completion of a three-unit course in Real Estate Principles. In addition, either with the examination or with the license application, or within 18 months after issuance of a license, the licensee must furnish official transcripts or certification with school seal confirming successful completion of a three-unit course in Real Estate Practice and one additional college level course listed below. Completion of the Real Estate Salesperson License Preparation Certificate satisfies the course requirements.

This program is designed to prepare the student for an entry-level position in the Real Estate sales field.

#### CERTIFICATE OF PROFICIENCY

Program Requirements		Units
RE 100	Real Estate Principles	3
RE 115	Real Estate Practice	3
<b>Electives (Select 3-5 units)</b>		
ACCT 103 and	Financial Accounting	
ACCT 104	Accounting Spreadsheet Lab	5
BUS 115	Business Law	3
RE 105	Real Estate Finance	3
RE 110	Real Estate Appraisal	3
RE 120	Legal Aspects of Real Estate	3
RE 130	Real Estate Economics	3
RE 140	Introduction to Property Management	3
RE 155	Escrow and the Title Procedures	3
RE 156	Advanced Escrow Procedures	3

**TOTAL UNITS** **9-11**

#### COURSE OFFERINGS

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

#### RE 49 California Real Estate License Exam Preparation (.5)

½ hour lecture

**Prerequisite:** RE 100

**Note:** Credit/No credit grading; may be taken 2 times.

A specific review of materials included in the California Real Estate Licensing Exams (Salesperson and Broker). Testing techniques, stress management, and study skills will be covered.

#### RE 100 Real Estate Principles (3)

3 hours lecture

**Note:** Not open to students who have taken advanced real estate courses. This course may be offered on television. A grade of 'C' must be earned in this course before a Real Estate Salesperson License will be awarded. This course must be completed or in progress before the Real Estate Salesperson Exam can be taken.

**Transfer acceptability:** CSU

A real estate course covering the basic laws and principles of California real estate. Gives understanding, background, and terminology necessary for advanced study in specialized courses.

#### RE 105 Real Estate Finance (3)

3 hours lecture

**Recommended preparation:** A minimum grade of 'C' in RE 100 or real estate license

**Transfer acceptability:** CSU

Analysis of real estate financing, including lending policies and problems in financing transactions in residential, apartment, commercial, special purpose properties, and land. Conventional and governmental programs emphasized.

#### RE 110 Real Estate Appraisal (3)

3 hours lecture

**Recommended preparation:** RE 100 or real estate license

**Transfer acceptability:** CSU

An introductory course covering the purposes of appraisals, the appraisal process, and the different approaches, methods, and techniques used to determine the value of various types of property. Emphasis will be on residential and single unit property.

#### RE 111 Advanced Real Estate Appraisal (3)

3 hours lecture

**Recommended preparation:** RE 110 or 130

**Transfer acceptability:** CSU

Emphasis will be on the income approach to value. This course covers the appraisal of apartments, commercial/industrial properties, hotels, and business opportunities. Narrative report writing is required. All the continuing education requirements of the Office of Real Estate Appraisers will be covered, including 7 hours of the uniform standards of professional appraisal practice and state and federal laws and regulations.

#### RE 112 Business Appraisal (3)

3 hours lecture

**Recommended preparation:** RE 100, 111, or BUS 100

This course provides specialized training for licensed real estate salespersons, brokers, and appraisers in the methods and techniques used to evaluate small businesses. This course also includes fifteen hours of the Uniform Standards of Professional Appraisal Practice, required of students applying for the real estate residential, certified residential, or certified general appraisal exam.

#### RE 115 Real Estate Practice (3)

3 hours lecture

**Recommended preparation:** RE 100 or real estate license

**Transfer acceptability:** CSU

Day to day operations in real estate roles and brokerage, including listing, prospecting, advertising, financing, sales techniques, escrow, and ethics. Applies toward State's educational requirements for the broker's examination.

#### RE 120 Legal Aspects of Real Estate (3)

3 hours lecture

**Recommended preparation:** A minimum grade of 'C' in RE 100 or real estate license

**Transfer acceptability:** CSU

A study of California real estate law, including rights incident to property ownerships and management, agency, contracts, and application to real estate transfer, conveyancing, probate proceedings, trust deeds and foreclosure, as well as recent legislation governing real estate transactions. Applies toward educational requirement of broker's examination.

**RE 130 Real Estate Economics (3)**

3 hours lecture

**Recommended preparation:** A minimum grade of 'C' in RE 100 or real estate license

**Transfer acceptability:** CSU

Deals with those trends and factors which affect the value of real estate; the nature and classification of land economics, the development of property, construction and sub division, economic values and real estate evaluation; real estate cycles and business fluctuations, residential market trends, and real property trends.

**RE 135 Real Estate Investments (3)**

3 hours lecture

**Transfer acceptability:** CSU

Real estate investing for the layperson; basic factors in the investment field; selection of real estate investments; methods of analyzing and appraising real property; expanding tax benefits and consequences; real estate investment; modern methods of group purchases through various types of syndications, including limited partnerships and real estate investment trust; and case studies of actual or hypothetical investments. The State Department of Real Estate has given special approval for this course to be used in the elective group for the Real Estate Salesperson and Broker State License.

**RE 140 Introduction to Property Management (3)**

3 hours lecture

**Recommended preparation:** A minimum grade of 'C' in RE 100 or real estate license

**Transfer acceptability:** CSU

A practical approach to the principles and practices of managing income properties, including leasing, collections, and rent schedule; budget and purchasing, market economics; evictions; maintenance; taxation; and record keeping.

**RE 145 Real Estate Exchanges (3)**

3 hours lecture

**Transfer acceptability:** CSU

A fundamental course for real estate licensees who have had broad experience in residential, commercial, and urban land transactions. Theory of exchanges, building of estates, income tax advantages, and trends of the market. By means of case studies actual exchanges are analyzed, planned, and executed.

**RE 150 Real Estate Income Taxation (2)**

2 hours lecture

**Recommended preparation:** RE 100 or real estate license

**Transfer acceptability:** CSU

This course is designed to investigate real estate income taxation as it applies to the individual or business entity. It is intended that the student will derive a fuller understanding of both the use and the philosophy of tax law as it applies to real estate transactions. This course does not authorize students to advise clients regarding tax laws.

**RE 155 Escrow and the Title Procedures (3)**

3 hours lecture

**Recommended preparation:** RE 100 or real estate license

**Transfer acceptability:** CSU

Escrow procedures including the processing and close of sale and loan escrows, the familiarizations and drawing of documents, proration, title searches, title reports, and other details pertinent to efficient escrow proceedings.

**RE 156 Advanced Escrow Procedures (3)**

3 hours lecture

**Recommended preparation:** RE 155

**Transfer acceptability:** CSU

Advanced course covering the more difficult and unusual types of escrow. Case problems on exchanges and condominiums.

**RE 157 Escrow Problems (3)**

3 hours lecture

**Recommended preparation:** RE 156

**Transfer acceptability:** CSU

Further study of the more unusual and difficult types of escrows with particular attention to those wherein conflict or dispute arises. Actual case problems

are presented for evaluation and discussion. Some cases include compliance with conditions, agency relationships, wrongful delivery, conditional deposits, liability assignments, delivery, and escrow instructions.

**RE 158 Current Trends in Escrow (3)**

3 hours lecture

**Recommended preparation:** RE 157

**Transfer acceptability:** CSU

A refresher course for Escrow officers and supervisors covering current problems, legislation, and court cases. Open discussions and exchange of ideas will be expected of participants.

**RE 197 Real Estate Topics (.5-4)**

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

**Note:** May be taken 4 times

**Transfer acceptability:** CSU

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

**Recreation (REC)**

Contact the Physical Education Department for further information, (760) 744-1150, ext. 2462. For transfer information, consult a Palomar College counselor.

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

**PROGRAMS OF STUDY**

**Outdoor Leadership**

Provides the skills necessary for work as a leader in outdoor activities for federal, state, municipal, and private recreational agencies.

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

Program Requirements		Units
AJ 100	Introduction to Criminal Justice	3
GC/R GC 170	Screen Printing	3
HE 100	Health Education and Fitness Dynamics	3
PE 104/EME 100	Advanced First Aid	3
REC 110	Community Recreation	3
CE 100	Cooperative Education	3,4

**TOTAL UNITS 18 - 19**

Recommended Elective: PE 230

**Recreation Agency Leader**

Provides the skills necessary for work as a leader in a municipal or private recreation program.

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

Required Courses		Units
AJ 100	Introduction to Criminal Justice	3
GC/R GC 170	Screen Printing	3
HE 100	Health Education and Fitness Dynamics	3
PE 104/EME 100	Advanced First Aid	3
REC 110	Community Recreation	3
REC 120	Recreational Team Sports	2
CE 100	Cooperative Education	1,2,3,4

**TOTAL UNITS 18 - 21**

Recommended Electives: MUS 197; PE 230

### COURSE OFFERINGS

**REC 110 Community Recreation (3)**

3 hours lecture

**Transfer acceptability:** CSU

Scope of community recreation; basic philosophy of leisure time agencies and organizations for youth; program planning; playground practices; basic systems of organization; and policy formation.

**REC 115 Recreational Leadership (3)**

3 hours lecture

**Transfer acceptability:** CSU

Program planning and principles of group leadership; organized games and special events, playground management.

**REC 120 Recreational Team Sports (2)**

2 hours lecture

**Transfer acceptability:** CSU

The planning, organizing, of team sports designed to serve the interest of all people in a recreational setting. The course is designed to provide the methods and organization for group instruction in team sports including softball, soccer, touch football, volleyball, and basketball.

## Religious Studies (RS)

See also American Indian Studies, Anthropology, History, Judaic Studies, Philosophy

Contact the Behavioral Sciences Department for further information, (760) 744-1150, ext. 2330

### COURSE OFFERINGS

**RS 101 World Religions (3)**

3 hours lecture

**Transfer acceptability:** CSU; UC

A comparative study of the major figures from saviors to gurus, the practices and the teachings of the major religions of the world, Western and Eastern, ancient and modern.

**RS 105 Ways of Understanding Religion (3)**

3 hours lecture

**Transfer acceptability:** CSU; UC

An exploration of religious phenomena and the various approaches by which Religious Studies has attempted to understand them. Such phenomena as mysticism, use of scripture, ritual, religious ethics, concepts of human destiny, and the meaning of religion in the modern secular world will be examined. Examples will be drawn from Eastern and Western cultures in ancient, medieval, and modern times.

**RS 110 Religion in America (3)**

3 hours lecture

**Transfer acceptability:** CSU; UC

An introduction to the rich diversity of religious experience in the United States exploring the impact religion has had on our nation's history and culture. Native American, Asian, African-American, Jewish, Roman Catholic, Protestant, and sectarian movements will be discussed.

**RS 120 Ethics of World Religions (3)**

3 hours lecture

**Transfer acceptability:** CSU; UC

A study of how world religions historically developed their ethical positions and how these are expressed today. Religious attitudes about women's rights, gay rights, the environment, business, death and dying, abortion, race relations, and sexuality will be discussed.

**RS 197 Religious Studies Topics (.5-4)**

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

**Note:** May be taken 4 times.

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

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

## Secretarial

See Office Information Systems

## Sign Language

See American Sign Language

## Sociology (SOC)

See also American Indian Studies, Africana Studies, Chicano Studies

Contact the Behavioral Sciences Department for further information, (760) 744-1150, ext. 2329

### COURSE OFFERINGS

**SOC 100 Introduction to Sociology (3)**

3 hours lecture

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

A study of the principles and problems pertaining to group behavior, the relationships among human beings, the development and nature of institutions, and the structure of society.

**SOC 105 Marriage, Family, and Intimate Relationships (3)**

3 hours lecture

**Note:** Cross listed as PSYC 105

**Transfer acceptability:** CSU, UC

A study of the psychology and sociology of the family and intimate relationships. Emphasizes factors that enhance interpersonal relationships. Topics include love, marital choice, communication, conflict, and changing models of the family. Examines cross-cultural and historical factors that impact the family as a social institution and the impact of gender, race and ethnicity, social class, age, and sexual orientation on family organization.

**SOC 110 Social Problems (3)**

3 hours lecture

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

Identification and analysis of contemporary social problems in the United States, with emphasis on the sociological factors involved. Topics include poverty and economic inequality; gender inequality; racial and ethnic inequality; problems in the family, government, education, and the economy; crime; drug use; warfare and violence, among others. A critical evaluation of the causes and solutions.

**SOC 115 Introduction to Women's Studies (3)**

3 hours lecture

**Transfer acceptability:** CSU; UC

The study of the position of women in American society from a sociological and cultural perspective. Topics to be studied include the theoretical approaches to studying gender; the impact of race and ethnicity, class, nationality, and sexual orientation on women's lives; cross-cultural variations in gender roles; the socialization of women; women's role in the major social institutions – the family, education, the political system, religion, the economy, and the mass media; violence against women; and feminism as a social movement.

- SOC 120 Social Psychology (3)**  
3 hours lecture  
**Note:** Cross listed as PSYC 120  
**Transfer acceptability:** CSU; UC  
Explores relationships between the behavior of individuals and the structure of society. Emphasizes the importance of language, roles, and the concept of the self in the socialization process.
- SOC 125 Human Sexuality (3)**  
3 hours lecture  
**Note:** Cross listed as PSYC 125  
**Transfer acceptability:** CSU; UC  
Survey of topics pertinent to an understanding of the development of human sexuality. Emphasis on biological, psychological, and cultural determinants of sexual behavior. Current sex norms and various aspects of interpersonal and individual sexual adjustment.
- SOC 140 Introduction to Psychological and Social Services (4)**  
3 hours lecture 3 hours laboratory  
**Note:** Cross listed as AODS 140/PSYC 140  
**Transfer acceptability:** CSU  
An overview of the theoretical basis of counseling skills, including social work, psychodynamic, behavioral, and client-centered approaches. The roles of psychologists, sociologists, social workers, family therapists, and therapeutic support providers are compared and contrasted, and the issues they deal with are described. This course provides students with an opportunity to observe actual practices of human services providers working as interdisciplinary team members in an agency setting. 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 Chemical Dependency (3)**  
3 hours lecture  
**Note:** Cross listed as AODS 150/PSYC 150  
This basic course will provide a historical perspective on alcohol and other psychoactive drug abuse and its impact on the community. An interdisciplinary approach will be used. Topics will include definitions, sociocultural factors related to use and/or abuse, identification of issues and models of dependency and recovery, and analysis of the effectiveness of policies and programs.
- SOC 155 The Physiology and Pharmacology of Psychoactive Drugs (3)**  
3 hours lecture  
**Note:** Cross listed as AODS 155/PSYC 155  
This course will examine how psychoactive drugs affect the nervous system. Ways of classifying drugs will be identified including the processes of physical and psychological dependence, tolerance, withdrawal, and genetic predispositions. Temporary and 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  
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 197 Special Topics in Sociology (1,2,3)**  
1, 2, or 3 hours lecture  
**Note:** May be taken 4 times  
**Transfer acceptability:** CSU; UC – Credit determined by UC upon review of course syllabus.  
Current topics in sociology will be discussed in lecture or seminar formats. Issues in such areas as deviance, stratification, demography, gender roles, death and dying, new immigrant groups, and others will be analyzed in cultural context from various theoretical perspectives. Content will vary from semester to semester.
- SOC 200 Race, Class, and Ethnic Groups in America (3)**  
3 hours lecture  
**Note:** Cross listed as AMS/MCS 200  
**Transfer acceptability:** CSU; UC  
This course is designed to introduce the topics of intergroup relations in general to superordinate-subordinate relations in particular; as exemplified in various racial, ethnic, social class, and cultural groups. Emphasis is primarily on contemporary relations in the United States, although a comparative perspective is also offered.
- SOC 205 Statistics for the Behavioral Sciences (3)**  
3 hours lecture  
**Prerequisite:** A minimum grade of 'C' in MATH 56 or 60 or eligibility determined through the math placement process  
**Note:** Cross listed as PSYC 205  
**Transfer acceptability:** CSU; UC – BIOL 215, MATH 120, and PSYC/SOC 205 combined: maximum credit, one course; CAN PSY 6  
Quantitative methods as applied to behavioral science data. Frequency distributions, measures of central tendency, variability, theory of error, measures of significance, correlation, regression, and an introduction to analysis of variance. Also included is an introduction to the use of computers in statistics.
- SOC 205L Data Analysis in Psychology and Sociology (1)**  
3 hours laboratory  
**Corequisite:** PSYC/SOC 205  
**Note:** Cross listed as PSYC 205L  
**Transfer acceptability:** CSU; UC  
Use of the computer as a tool for calculating statistics and exploring data in Psychology and Sociology.
- SOC 250 Group Leadership and Process (3)**  
3 hours lecture  
**Note:** Cross listed as AODS 250/PSYC 250  
An introduction to the dynamics of group interaction, with emphasis upon the individual's firsthand experience as the group studies itself under supervision. 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 Treatment Modalities, Law and Ethics (3)**  
3 hours lecture  
**Note:** Cross listed as AODS 255/PSYC 255  
This course reviews the principles and practices of addiction treatment including screening, intake, orientation, assessment, treatment planning, counseling, case management, crisis intervention, education of clients and their families, referral, report and record keeping, and consultation. Legal and ethical standards of practice for addictions counselors will be reviewed and included in this body of knowledge, skills, and attitudes.
- SOC 260 Chemical Dependency Family Counseling (3)**  
3 hours lecture  
**Note:** Cross listed as AODS 260/PSYC 260  
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 296 Special Problems in Sociology (1,2,3)**  
 1, 2, or 3 hours lecture  
**Note:** May be taken 4 times  
**Transfer acceptability:** CSU; UC – Credit determined by UC upon review of course syllabus.  
 An individualized or group project in sociology of any nature. Extensive use of slides and other illustrative materials.

**SOC 298 Directed Field Experience I (5)**  
 3 hours lecture 6 hours laboratory  
**Note:** Cross listed as AODS 298/PSYC 298  
**Transfer acceptability:** CSU  
 Principles of interpersonal conflict dynamics and approaches for conflict resolution are analyzed. Non-directive, directive and behavior modification skills that are used to increase motivation for positive behavioral change are compared and evaluated. Field placement provides students with an opportunity to observe human services providers dealing with conflict in agency settings using structured and informal conflict resolution approaches. Interns are also provided with opportunities to practice conflict resolution techniques and skills for increasing motivation for positive change.

**SOC 299 Directed Field Experience II (6)**  
 3 hours lecture-9 hours laboratory  
**Note:** Cross listed as AODS 299/PSYC 299  
 This course emphasizes advanced concepts in chemical dependency. The functions and consequences of denial and ambivalence are explored in depth, and students refine their skills for the 12 core functions of effective clinical practice. They prepare for the oral California certifying examinations and for entry level positions as alcohol and drug counselors. Students practice these skills in class and under the supervision of agency personnel.

## Spanish (SPAN)

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

### COURSE OFFERINGS

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

Courses numbered under 100 are not intended for transfer credit.

An activity may be taken four times for credit. Activity is defined to include all ability levels. (e.g., A student may take a total of only four Conversation courses for credit.)

**SPAN 50 Beginning Conversation (3)**  
 3 hours lecture  
**Note:** May be taken 2 times  
 This is the first course in the two-course series of Beginning Spanish conversation. Emphasis is on speaking and listening through the use of everyday vocabulary and communicative skills. Reading and writing skills will be developed from involvement with the spoken language. The course will also introduce students to the cultures of the Spanish-speaking world.

**SPAN 51 Intermediate Conversation (3)**  
 3 hours lecture  
**Prerequisite:** SPAN 50  
**Note:** May be taken 2 times  
 This is the second course in the two-course series of Beginning Spanish conversation. Emphasis is on speaking and listening, using everyday vocabulary and communicative skills. Reading and writing skills will be developed from involvement with the spoken language. This course will also introduce students to the cultures of the Spanish-speaking world.

**SPAN 80 Spanish Through Song (1)**  
 1 hour lecture

A highly participatory course in which students of all levels develop and improve pronunciation skills, listening comprehension skills, vocabulary and certain basic grammar concepts by means of pedagogically chosen and enjoyable Spanish songs representing a variety of forms such as Salsa, Romantica, Cumbia, Mariachi, Popular Music and Latin Rock. Students become dynamically aware that songs are an essential expression of Hispanic culture.

**SPAN 101 Spanish I (5)**  
 5 hours lecture 1 hour laboratory  
**Transfer acceptability:** CSU; UC; CAN SPAN 2; SPAN 101+ 102= CAN SPAN SEQ A

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

**SPAN 101A Spanish IA (Formerly SPAN 105) (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

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

**SPAN 101B Spanish IB (Formerly SPAN 106) (3)**  
 3 hours lecture

**Prerequisite:** 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, and is a continuation of Spanish 101A. This elementary level course is a study of the Spanish language and Spanish-speaking cultures, with emphasis on the development of communicative skills and basic structures.

**SPAN 102 Spanish II (Formerly SPAN 110) (5)**  
 5 hours lecture 1 hour laboratory

**Prerequisite:** SPAN 101 or 101B or two years of high school Spanish

**Transfer acceptability:** CSU; UC; CAN SPAN 4; SPAN 101+ 102= CAN SEQ A

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

**SPAN 102A Spanish IIA (Formerly SPAN 115) (3)**  
 3 hours lecture

**Prerequisite:** SPAN 101 or 101B or two years of high school Spanish

**Note:** Covers the first half of SPAN 102; not open to students with credit for SPAN 102

**Transfer acceptability:** CSU; UC

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

- SPAN 102B Spanish IIB** (3)  
(Formerly SPAN 116)  
3 hours lecture  
**Prerequisite:** SPAN 102A or two years of high school Spanish  
**Note:** Covers the second half of SPAN 102; not open to students with credit for SPAN 102  
**Transfer acceptability:** CSU; UC  
102B is equivalent to the second half of Spanish 102, and is a continuation of Spanish 102A. This elementary level course is a study of the Spanish language and Spanish-speaking cultures, with continued emphasis on the development of communicative skills and basic structures.
- SPAN 201 Spanish III** (5)  
5 hours lecture-1 hour laboratory  
**Prerequisite:** SPAN 102 or 102B or three years of high school Spanish  
**Transfer acceptability:** CSU; UC – SPAN 201 and 240 combined: maximum credit, one course; CAN SPAN 8; SPAN 201+ 202=CAN SPAN SEQ B  
This course is the third semester of Spanish. This intermediate level course is a study of the Spanish language and Spanish-speaking cultures, focusing on intermediate level structures and readings of culturally relevant authentic materials. Emphasis is on developing oral, listening, reading and writing skills in order to acquire proficiency in Spanish. Course combines in-class instruction with self-paced study in the Foreign Language Laboratory. Class is largely conducted in Spanish.
- SPAN 201A Spanish IIIA** (3)  
(Formerly SPAN 205)  
3 hours lecture  
**Prerequisite:** SPAN 102 or 102B or three years of high school Spanish  
**Note:** Covers the first half of SPAN 201; not open to students with credit for SPAN 201  
**Transfer acceptability:** CSU; UC  
Spanish 201A is equivalent to the first half of Spanish 201. This intermediate level course is a study of the Spanish language and Spanish-speaking cultures, focusing on intermediate level structures and readings of culturally relevant authentic materials. Emphasis is on developing oral, listening, reading and writing skills in order to acquire proficiency in Spanish. Class is largely conducted in Spanish.
- SPAN 201B Spanish IIIB** (3)  
(Formerly SPAN 206)  
3 hours lecture  
**Prerequisite:** SPAN 201A  
**Note:** Covers the second half of SPAN 201; not open to students with credit for SPAN 201  
**Transfer acceptability:** CSU; UC  
Spanish 201B is the second half of Spanish 201, and is a continuation of Spanish 201A. This intermediate level course is a study of the Spanish language and Spanish-speaking cultures, focusing on intermediate level structures and readings of culturally relevant authentic materials. Emphasis is on developing oral, listening, reading and writing skills in order to acquire proficiency in Spanish. Class is largely conducted in Spanish.
- SPAN 202 Spanish IV** (5)  
(Formerly SPAN 210)  
5 hours lecture  
**Prerequisite:** SPAN 201 or four years of high school Spanish  
**Transfer acceptability:** CSU; UC – SPAN 202 and 241 combined: maximum credit, one course; CAN SPAN 10; SPAN 201+ 202=CAN SPAN SEQ B  
This course is the fourth semester of Spanish. This intermediate level course is a study of the Spanish language and of special topics on the culture of the Spanish-speaking world. Emphasis is on further development of cross-cultural awareness, as well as, the development of oral, listening, reading and writing skills in order to improve communicative competence in Spanish. Class is largely conducted in Spanish.
- SPAN 215 Advanced Spanish** (3)  
3 hours lecture  
**Prerequisite:** SPAN 202  
**Transfer acceptability:** CSU; UC  
Advanced grammar and composition.
- SPAN 216 Advanced Spanish Conversation** (3)  
3 hours lecture  
**Prerequisite:** SPAN 202  
**Transfer acceptability:** CSU; UC  
Topics in Spanish language and culture with emphasis on improving fluency and building vocabulary.
- SPAN 235 Intermediate Conversation and Writing** (3)  
3 hours lecture  
**Prerequisite:** SPAN 201  
**Note:** May be taken 2 times  
**Transfer acceptability:** CSU; UC  
Topical discussions, oral and written themes, and practical vocabulary.
- SPAN 295 Directed Study in Spanish** (1,2,3)  
3, 6, or 9 hours laboratory  
**Note:** May be taken 4 times for a maximum of six units  
**Transfer acceptability:** CSU  
Individual study in areas of Spanish language or culture. Designed for the student who has the initiative to work independently on a topic that is outside the scope of regularly scheduled classes.
- SPAN 296 Special Studies in Spanish** (1-3)  
1 to 3 hours lecture  
**Note:** May be taken 4 times for a maximum of six units  
**Transfer acceptability:** CSU  
Improve Spanish language competency and cultural awareness through individualized study, lectures, or class excursions. Undertaken during regular sessions, summer, or vacations.

## Speech (SPCH)

Contact the Speech Communication/Forensics/ASL Department for further information, (760) 744-1150, ext. 2405

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

### PROGRAM OF STUDY

#### Speech Communication

Prepares the student for employment in programs where advanced speaking skills are necessary. Transfer students should consult the four year college or university catalog for specific requirements or see a Palomar College counselor.

#### A.A. DEGREE MAJOR

Program Requirements	Units
SPCH 100 Oral Communication	3
SPCH 105 Beginning Argumentation and Debate	3
SPCH 115 Interpersonal Communication	3
SPCH 120 Human Communication	3
SPCH/TA125 Beginning Oral Interpretation	3
SPCH 131 Intercultural Communication	3

**TOTAL UNITS 18**

#### COURSE OFFERINGS

- SPCH 100 Oral Communication** (3)  
3 hours lecture  
**Transfer acceptability:** CSU; UC; CAN SPCH 4  
An introduction to the fundamental principles and techniques of public address. Students will frequently prepare and present talks of informative or persuasive intent. Emphasis will be placed on the collection, analysis, and organization of material appropriate to typical public address situations, as well as on the linguistic, vocal, and physical skills needed for effective delivery.

- SPCH 105 Beginning Argumentation and Debate (3)**  
*3 hours lecture*  
**Prerequisite:** A minimum grade of 'C' in ENG 100  
**Transfer acceptability:** CSU; UC; CAN SPCH 6  
 Argumentative theory and practice including burden of proof, logical analysis, research, types and uses of evidence, deductive and inductive reasoning, logical fallacies, written argumentative essay construction, refutation, rebuttal, and argument evaluation paradigms. Basic written communication skills are developed through composing, drafting, reviewing, and rewriting (1) analytical topic area essays, (2) affirmative and negative cases, and (3) written peer evaluation essays. Oral communication skills are developed through the agency of public debate. Critical perspectives on values and public policy, including examinations of diverse paradigms are emphasized.
- SPCH 115 Interpersonal Communication (3)**  
*3 hours lecture*  
**Transfer acceptability:** CSU  
 Introduction to the fundamental principles and terms of communication study in the interpersonal or face-to-face context. Analysis of communication patterns in developing, stable, and deteriorating relationships. Topics include communication rules and competence, perception and empathy, love, and family interaction.
- SPCH 120 Human Communication (3)**  
*3 hours lecture*  
**Transfer acceptability:** CSU; UC  
 A comprehensive introduction to the study of human communication processes including verbal and nonverbal modalities. Human abilities are compared to the communication systems of other species. Key definitions and concepts in communication theory are reviewed. Communication processes in personal, public, and mass mediated contexts are analyzed.
- SPCH 125 Beginning Oral Interpretation (3)**  
*3 hours lecture*  
**Note:** Cross listed as TA 125  
**Transfer acceptability:** CSU; UC  
 An introduction to the oral reading of prose, poetry, and drama in distinct and intertextual formats. Models of critical analysis will be applied to written literature and reading will be performed and evaluated by applying principles of effective delivery.
- SPCH 131 Intercultural Communication (3)**  
*3 hours lecture*  
**Transfer acceptability:** CSU  
 Introduction to the fundamental principles and terms of communication study in intercultural or cross-cultural contexts. Analysis of the opportunities and problems presented by national, ethnic, linguistic, and gender-based variation in verbal and nonverbal behaviors.
- SPCH 145 Management of Speech Activities (1)**  
*2 hours lecture/laboratory*  
**Note:** May be taken 4 times  
**Transfer acceptability:** CSU  
 Planning, preparation, management, and supervision of speech tournaments and other interscholastic speech activities.
- SPCH 150 Debate Research (1)**  
*2 hours lecture/laboratory*  
**Note:** May be taken 4 times  
**Transfer acceptability:** CSU  
 Advanced debate training including investigation and research of the national intercollegiate debate resolution.
- SPCH 160 Practical Public Speaking (1)**  
*2 hours lecture/laboratory*  
**Note:** May be taken 4 times  
**Transfer acceptability:** CSU  
 Thorough individual preparation for effective oral communication in a variety of speech situations. This class will make up the college forensics team and the

student speaker's bureau; students will be selected from classes in the speech curricula. Required of all students participating in intercollegiate competitive speech activities.

- SPCH 165 Leadership Communication (3)**  
*6 hours lecture/laboratory*  
 Designed to increase participant's knowledge of the function of communication in leadership and group contexts. Students will explore the nature of human communication, one on one interpersonal interaction, small and large group communication, organizational communication, and public speaking. More specifically, discussion and activities will focus on the topics of perception, persuasion, listening, ethics, credibility, parliamentary procedure, and problem solving. This course is designed primarily for participants in Associated Student Government and other student leadership positions at Palomar College. This is a TBA class and participants will be expected to attend local, state, and national conferences.

- SPCH 197A Topics in Speech Communication (.5-4)**  
 Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture, laboratory, or lecture/laboratory may be scheduled by the department. Refer to Class Schedule.  
**Note:** May be taken 4 times  
**Transfer acceptability:** CSU; UC – Credit determined by UC upon review of course syllabus.  
 Topics in Speech Communication. See Class Schedule for specific topic offered. Course title will designate subject covered.

- SPCH 290 Competitive Intercollegiate Forensics (1,2,3)**  
*2, 4, or 6 hours lecture/laboratory*  
**Note:** May be taken 4 times  
**Transfer acceptability:** CSU; UC – Credit determined by UC upon review of course syllabus.  
 Advanced projects including individual research. Tutoring and performance for college classes and community including reader's theatre; informative, persuasive, entertaining, extemporaneous, and impromptu speaking; communication analysis, prose, poetry, duo interpretation, programmed reading, and debate.

## Tagalog (TAG)

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

### COURSE OFFERINGS

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

- TAG 101 Tagalog I (5)**  
*5 hours lecture-1 hour laboratory*  
**Transfer acceptability:** CSU; UC  
 This course is the first semester of Tagalog. This elementary course is a study of pronunciation, essentials of grammar, reading, speaking, and writing. Relationship between language and culture.
- TAG 102 Tagalog II (5)**  
**(Formerly TAG 110)**  
*5 hours lecture-1 hour laboratory*  
**Prerequisite:** TAG 101, or two years of high school Tagalog  
**Transfer acceptability:** CSU; UC  
 This course is the second semester of Tagalog. This elementary level course is a study of the Tagalog language and Tagalog-speaking cultures, with continued emphasis on the development of communicative skills and basic structures. Course combines in-class instruction with self-paced study in the Foreign Language Laboratory.



**TAG 201 Tagalog III (5)**  
*5 hours lecture*  
**Prerequisite:** TAG 102 or three years of high school Tagalog  
**Transfer acceptability:** CSU; UC  
 This course is the third semester of Tagalog. This intermediate level course is a study of grammar, review, composition, and continued oral practice. Appreciation of Tagalog culture through composition and oral practice assignments.

## Theatre Arts (TA)

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

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

### PROGRAMS OF STUDY

#### Entertainment Technology

This program will prepare students for employment in the fields of entertainment technologies at entry level. The areas of potential employment include theme parks, casinos, cruise ships, concerts, gallery display and design, event installations, live event technical support, and theatre venues providing non-theatre related events. Basic rigging and production safety will be a component of this program.

#### CERTIFICATE OF ACHIEVEMENT

Program Requirements		Units
CSIS 108	Hardware and O.S. Fundamentals	3
ENTT 100	Introduction to Entertainment Technology	1
ENTT 105/ TA 105	Introduction to Technical Theatre	2.5
ENTT 107/ TA 107	Lighting for Stage and Television	3
ENTT 130/ RTV 130	Radio Production	3
TA 112/ ENTT 112	Entertainment Audio Production	3
TA 197D	Stage Crew Workshop	2
TA 297 or ENTT 294B/ RTV 294B	Experimental Topics in Theatre Television Internships/Production	1
<b>Electives (Select 11 units)</b>		
ENTT 294B/ RTV 294B	Television Internships/Production	1-3
FASH 126	Fashion Show Presentation	1
FASH 135	Basic Sewing Construction	3
FASH 139	Pattern Making/Fashion Design	3
RTV 100	Introduction to Radio/TV	3
RTV 230	Digital Audio with Pro Tools	3
TA 106	Elementary Stage Costume	3
TA 108/ ENTT 108	Stagecraft and Scene Design for Theatre and TV	3
TA 109	Elementary Stage Make-Up	3
TA 111	Technical Theatre Production	.5
TA 170	Computer Aided Drafting for Theatre	3
TA 297	Experimental Topics in Theatre	1-3
WELD 100	Welding I	3
<b>TOTAL UNITS</b>		<b>29.5</b>

## Theatre Arts

Prepares the student for employment in programs where basic skills are necessary, especially children's theatre and community theatre. Transfer students should consult the four year college or university catalog for specific requirements or see a Palomar College counselor.

### A.A. DEGREE MAJOR

Program Requirements		Units
TA 100	Introduction to the Theatre	3
TA/ENTT 105	Introduction to Technical Theatre	2.5
TA 109	Elementary Stage Make-Up	3
TA 111	Technical Theatre Production	.5
TA 115	Beginning Acting I: Fundamentals	3
TA 116	Beginning Acting II: Scene Study	3
TA 140 or TA 141	History/Theatre thru 17th Century History/Theatre/18th Century to the Present	3
TA 215 or TA 217	Intermediate Acting I: Styles Intensive Actor Training	3

#### Plus one of the following courses

TA/ENTT 107	Lighting for Stage and Television	3
TA/ENTT 108	Stagecraft and Scene Design for Theatre and TV	3
TA/SPCH 125	Beginning Oral Interpretation	3

**TOTAL UNITS 24**

Recommended Electives: TA 113, 184; DNCE/MUS/TA 173

#### Theatre Technical

Provides training in basic technical theatre skills for career employment in technical production areas of drama, music, and telecommunications. Also provides training for employment in children's theatre, junior theatre, and community theatre.

#### CERTIFICATE OF ACHIEVEMENT

Program Requirements		Units
TA 100	Introduction to the Theatre	3
TA/ENTT 105	Introduction to Technical Theatre	2.5
TA 106	Elementary Stage Costume	3
TA/ENTT 107	Lighting for Stage and Television	3
TA/ENTT 108	Stagecraft and Scene Design for Theatre and TV	3
TA 109	Elementary Stage Make-Up	3
TA 111	Technical Theatre Production	.5
TA /ENTT 112	Entertainment Audio Production	3
TA 115 or TA 116	Beginning Acting I: Fundamentals Beginning Acting II: Scene Study	3
TA 197D*	Stage Crew Workshop	2-6
TA 197E	Management of Theatre Activities	.5-3
<b>Plus one of the following courses</b>		
TA 140	History/Theatre thru 17th Century	3
TA 141	History/Theatre/18th Century to the Present	3
TA 170	Computer Aided Drafting for Theatre	3
TA 297	Experimental Topics in Theatre	1-3

**TOTAL UNITS 27.5 - 36**

Recommended Electives: CFT 100; DT 105; TA 197C

\* TA 197D must be taken two times for a minimum of 2 units.

### COURSE OFFERINGS

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

- TA 100 Introduction to the Theatre (3)**  
*3 hours lecture*  
**Transfer acceptability:** CSU; UC  
 A survey of theory and practice in the contemporary theatre including its literary, critical and technical aspects, and their relationships to historical backgrounds.
- TA 105 Introduction to Technical Theatre (2.5)**  
*5 hours lecture/laboratory*  
**Note:** Cross listed as ENTT 105  
**Transfer acceptability:** CSU; UC  
 A general survey of technical theatre including stagecraft, lighting, sound design, costuming, make up, production organization, business management, and promotion. Course will include practical skills in all areas.
- TA 106 Elementary Stage Costume (3)**  
*2 hours lecture-4 hours laboratory*  
**Prerequisite:** ENTT/TA 105  
**Transfer acceptability:** CSU; UC  
 Basic theories, techniques, and procedures of costume production for stage, film, and television. Practical training in college productions.
- TA 107 Lighting for Stage and Television (3)**  
*2 hours lecture-3 hours laboratory*  
**Prerequisite:** ENTT 105/TA 105  
**Note:** Cross listed as ENTT 107  
**Transfer acceptability:** CSU; UC  
 Techniques, theories, and procedures necessary to develop lighting and lighting effects integrated into film, television, and theatre productions. Practical experience in college productions.
- TA 108 Stagecraft and Scene Design for Theatre and Television (3)**  
*2 hours lecture-3 hours laboratory*  
**Prerequisite:** ENTT 105/TA 105  
**Note:** Cross listed as ENTT 108  
**Transfer acceptability:** CSU; UC  
 Technical practices and organization of production for theatre, film, and television. Practice in drafting, designing, and construction of scenery for college productions.
- TA 109 Elementary Stage Make-Up (3)**  
*2 hours lecture-4 hours laboratory*  
**Prerequisite:** ENTT/TA 105  
**Transfer acceptability:** CSU; UC  
 Basic theories, techniques, and procedures of make-up production for stage, film, and television. Practical training in college productions.
- TA 111 Technical Theatre Production (.5)**  
*1½ hours lecture/laboratory*  
**Prerequisite:** ENTT/TA 105  
**Corequisite:** TA 106, ENTT/TA 107, ENTT/TA 108, or TA 109  
**Note:** May be taken 4 times  
**Transfer acceptability:** CSU; UC  
 Techniques and procedures for all phases of technical theatre production with an emphasis on production organization. Practical training through college production.
- TA 112 Entertainment Audio Production (3)**  
*2 hours lecture-3 hours laboratory*  
**Note:** Cross listed as ENTT 112  
**Transfer acceptability:** CSU  
 Audio applications and technology for entertainment based uses. To understand set up, operation, troubleshooting techniques with audio signal chain.
- TA 113 Theatre and Comedy Improvisation (3)**  
*3 hours lecture*  
**Note:** May be taken 3 times  
**Transfer acceptability:** CSU  
 Practice and analysis of improvisational theatre and expansion of student's confidence and creative abilities. Development of a foundation for further work in the theatre.
- TA 115 Beginning Acting I: Fundamentals (3)**  
*3 hours lecture*  
**Note:** May be taken 4 times; Maximum of 4 completions in any combination of TA 115, TA 116  
**Transfer acceptability:** CSU; UC  
 In a workshop environment, the student will learn the basic tools and terminology of acting. The student will apply this knowledge and experience to the performance of short scenes.
- TA 116 Beginning Acting II: Scene Study (3)**  
*Three hours lecture*  
**Prerequisite:** TA 115  
**Note:** May be taken 2 times  
**Transfer acceptability:** CSU; UC  
 Designed to improve the actor's skills for performing scenes and monologues with truth and power. Actors will improve their ability to pursue the character's needs and objectives, to be vulnerable to their partners' words and actions and to create with a range of emotion. Actors in this class will continue to develop their vocal and physical technique.
- TA 123 Arts Across the Curriculum (3)**  
*3 hours lecture*  
**Note:** Cross listed as: ART/DNCE/MUS 123  
**Transfer acceptability:** CSU  
 This course is an introduction to the artistic creative process through a comparative study of dance, music, theatre, and visual arts, within a social and cultural context. The principles of artistic perception, creative expression, cultural and historical context, and aesthetic valuing will be discussed.
- TA 125 Beginning Oral Interpretation (3)**  
*3 hours lecture*  
**Note:** Cross listed as SPCH 125  
**Transfer acceptability:** CSU; UC  
 An introduction to the oral reading of prose, poetry and drama in distinct and intertextual formats. Models of critical analysis will be applied to written literature and reading will be performed and evaluated by applying principles of effective delivery.
- TA 140 History of the Theatre From Ancient Greece Through the 17th Century (3)**  
*3 hours lecture*  
**Transfer acceptability:** CSU; UC  
 A survey of the influence of different cultures, traditions, and technologies on the development of the theatre as a social institution from Ancient Greece through the 17th Century.
- TA 141 History of the Theatre From the 18th Century to the Present (3)**  
*3 hours lecture*  
**Transfer acceptability:** CSU; UC  
 A survey of the influence of different cultures, traditions, and technologies on the development of the theatre as a social institution from the 18th Century to the present.
- TA 155 Beginning Playwriting (3)**  
*3 hours lecture*  
**Transfer acceptability:** CSU  
 Study and analysis of form, style, and structure in dramatic literature. Students will write at least two one act plays for critical analysis. Selected student work will be given studio production.
- TA 160 Beginning Stage Direction (3)**  
*3 hours lecture*  
**Transfer acceptability:** CSU; UC

Training in the principles, procedures, and methods of stage direction. Students will serve as assistant directors on college productions and will also direct scenes for acting classes and studio productions.

**TA 170 Computer Aided Drafting for Theatre (3)**

6 hours lecture/laboratory

**Prerequisite:** TA/ENTT 108

**Note:** May be taken 2 times

**Transfer acceptability:** CSU

Basic introduction to computer aided drafting using AutoCAD software and IBM compatible or Macintosh computers. Hands on experience with AutoCAD to include basic mechanical drafting terminology and techniques. An introduction to user specific third party software as related to drafting and designing of scenery for college productions.

**TA 173 Musical Theatre Scenes (1)**

3 hours laboratory

**Note:** Cross listed as DNCE/MUS 173

**Transfer acceptability:** CSU

Rehearsal and performance of solo and group scenes from Broadway musicals dating from the 1930's to the present.

**TA 182 Introduction to Arts Management (3)**

9 hours laboratory

**Note:** Cross listed as AMS/ART/DNCE/MUS 182

**Transfer acceptability:** CSU

An introduction to the principles and practices of arts management through an interdisciplinary study of management topics in the visual and performing arts.

**TA 183 Internship in Arts Management (3)**

9 hours laboratory

**Prerequisite:** AMS/ART/DANCE/MUS or TA 182

**Note:** Cross listed as AMS/ART/DNCE/MUS 183

**Transfer acceptability:** CSU

Practical experience in arts management in the visual and performing arts.

**TA 184 Creative Theatre Ensemble (3)**

3 hours lecture

**Note:** May be taken 4 times

**Transfer acceptability:** CSU; UC

Students (actors, designers, directors, musicians, visual artists, etc.) will work together as an ensemble to create theater performances that rely on discipline, skill, imagination, and artistic courage.

**TA 197A Summer Theatre Workshop (3)**

6 hours lecture/laboratory

**Note:** May be taken 4 times

**Transfer acceptability:** CSU; UC

A lecture/laboratory course designed to give students guidance and direction in a variety of practical experiences in the theatre (including acting, lighting, scenery, costumes, and stage management) through productions of major works for public audiences.

**TA 197C Rehearsal and Performance (.5-3)**

1½ to 9 hours laboratory

**Note:** May be taken 4 times

**Transfer acceptability:** CSU; UC

Participation in college dramatic and musical productions as a member of the stage crew or house staff. At least one unit of this course is required of all theatre arts majors.

**TA 197D Stage Crew Workshop (.5-3)**

1½ to 9 hours laboratory

**Prerequisite:** Completion of, or concurrent enrollment in, TA 105/ENTT 105 or TA 11

**Note:** At least one unit of this course is required of all theatre arts majors; may be taken 4 times

**Transfer acceptability:** CSU; UC

Participation in college dramatic and musical productions as a member of the stage crew or house staff.

**TA 197E Management of Theatre Activities (.5-3)**

1½ to 9 hours laboratory

**Note:** May be taken 4 times

**Transfer acceptability:** CSU

The principles of organization, operation, and planning for theatre management including programming, ticket sales, box office records, and promotional news release writing. Practical use applied to theatre productions.

**TA 197F Theatre Topics (.5-4)**

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

**Note:** May be taken 4 times

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

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

**TA 215 Intermediate Acting I: Styles (3)**

3 hours lecture

**Prerequisite:** TA 116

**Note:** May be taken 2 times

**Transfer acceptability:** CSU; UC

This course emphasizes the application of fundamental acting skills to specific styles. The actors will learn how to accomplish the demands of different styles from Shakespeare to Theatre of the Absurd.

**TA 217 Intensive Actor Training (3)**

3 hours lecture

**Prerequisite:** TA 116 and audition

**Transfer acceptability:** CSU

The application of rigorous actor training techniques to develop the actor's ability to create compelling performances. The coursework will integrate physical, vocal and imagination training with psychological work, text analysis and ensemble training.

**TA 297 Experimental Topics in Theatre (1,2,3)**

3, 6, or 9 hours laboratory

**Prerequisite:** Previous theatre experience

**Note:** May be taken 4 times

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

Designed for students with particular interest in advanced projects, including individual research. Tutoring and performance for college classes and community.

## Wastewater Technology Education (WWT)

Contact Occupational & Noncredit Programs for further information, (760) 744-1150, ext. 2284

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

### PROGRAM OF STUDY

## Wastewater Technology Education

Specifically designed for individuals employed by or seeking employment in water districts in San Diego County.

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

Program Requirements		Units
WWT 100	Treatment Plant Operations	3
WWT/WTE 110	Waterworks Mathematics	3
WWT/WTE 120	Instrumentation and Controls	3
WWT/WTE/ PWM 125	Supervision	3
WWT 150	Collection Systems Operator	3
WWT 155	Treatment Process Control	3
WWT/WTE 215	Motors/Pumps/Oper/Maintenance	3
WWT/PWM 220	Discharge Compliance Fundamentals	3
<b>Electives (Select 6-7 units)</b>		
WWT/WTE 135	Backflow Prevention	3
WWT/WTE 138	Cross Connection Specialist	3
WWT 197	Wastewater Tech Education Topics	.5-4
CE 100*	Cooperative Education	3-4
<b>TOTAL UNITS</b>		<b>30 – 31</b>

\*Cooperative Education must be related to this major.

### COURSE OFFERINGS

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

**WWT 45 Vocational Math Skills for WWT/WTE (3)**  
3 hours lecture

**Note:** Cross listed as WTE 45

Introduction to the basic mathematical skills used in water and wastewater calculations. Particular interest is given to industry-relevant problems and examples.

**WWT 100 Treatment Plant Operations (3)**  
3 hours lecture

**Recommended preparation:** WWT/WTE 45

**Note:** May be taken 2 times

An introductory wastewater treatment plant operations course. Topics covered include: the various origins and characteristics of wastewater; an overview of wastewater collections systems; preliminary treatment; primary treatment; fixed film secondary biological treatment processes; treatment ponds and disinfection. Emphasis is given to the role of the operator and preparation for solving practical problems and problems typical of those found in Operator Certification examinations.

**WWT 110 Waterworks Mathematics (3)**  
3 hours lecture

**Recommended preparation:** WWT/WTE 45

**Note:** Cross listed as WTE 110

Provides instruction in entry level to intermediate level mathematical calculations used in the operation and evaluation of conventional water and wastewater treatment processes. The course content has been developed to meet training requirements for entry to intermediate level certification (Grade I III) for water treatment plant operators. Also, it will cover wastewater collection, treatment and disposal. Material will parallel some of the problems found on State Certification examination.

**WWT 120 Instrumentation and Controls (3)**  
3 hours lecture

**Prerequisite:** WTE/WWT 110

**Note:** Cross listed as WTE 120

**Transfer acceptability:** CSU

Introduction to basic electrical theory. Applications and uses of water and wastewater control systems including switches, relays, alarms, motors, instrumentation and telemetering.

**WWT 125 Supervision (3)**  
3 hours lecture

**Note:** Cross listed as WTE/PWM 125

Managerial aspects of public utilities including organization, decision making, coordination, communication, and public relations. Personnel management including recruiting, training, evaluation, discipline, promotion, morale, and grievances. Safety programs and encouraging safe conditions, actions and attitudes.

**WWT 135 Backflow Prevention (3)**  
2½ hours lecture 1½ hours laboratory

**Note:** Cross listed as WTE 135; may be taken 4 times

Concentrated training in recognition and abatement of cross connections in water supply and plumbing systems. Hands on backflow prevention device testing procedures for certification.

**WWT 138 Cross Connection Specialist (3)**  
3 hours lecture

**Recommended preparation:** WTE/WWT 135

**Note:** Cross listed as WTE 138

The study of the various levels of administrative and technical procedures necessary to operate a cross connection control program. Students will obtain the knowledge to become certified as a "Cross Connection Control Specialist" under the provisions set forth by American Water Works Association.

**WWT 150 Collection Systems Operator (3)**  
3 hours lecture

Wastewater collection systems and collection system equipment, pipeline cleaning and maintenance, system design, safety procedures, inspecting and testing procedures used in collections systems.

**WWT 155 Treatment Process Control (3)**  
3 hours lecture

**Recommended preparation:** WWT/WTE 110

A wastewater treatment and disposal course with an emphasis on control of these processes. Topics covered include: the activated sludge secondary treatment process and its variations; sludge digestion, treatment and disposal; safety and housekeeping; maintenance and an overview of effluent disposal, tertiary treatment and reclamation. Emphasis is also given to the role of the operator and provides preparation for solving process control calculations and problems typical of those found in Operator Certification examinations.

**WWT 197 Wastewater Technology Education Topics (.5-4)**

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

**Note:** May be taken 4 times

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

**WWT 215 Motors and Pumps, Operation and Maintenance (3)**  
3 hours lecture

**Recommended preparation:** WTE/WWT 110

**Note:** Cross listed as WTE 215

Identification of problems encountered, causes of problems, corrective solutions, and repairs in the operation of pumps and motors. Implementation of maintenance programs including scheduling and recordkeeping.

**WWT 220 Discharge Compliance Fundamentals (3)**  
2½ hours lecture-1½ hours laboratory

**Note:** Cross listed as PWM 220

Study of regulatory discharge compliance fundamentals of the Regional Water Quality Control Board point source and non-point source permitting process. Course study includes collection systems, storm water, and recycled water permit and reporting compliance.

## Water Technology Education (WTE)

Contact Occupational & Noncredit Programs for further information, (760) 744-1150, ext. 2284

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

### PROGRAM OF STUDY

## Water Technology Education

Specifically designed for individuals employed by or seeking employment in water districts in San Diego County.

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

#### Program Requirements Units

WTE 100	Waterworks Distribution	3
WTE 105	Water Treatment Plant Operation I	3
WTE/WWT 110	Waterworks Mathematics	3
WTE/WWT 120	Instrumentation and Controls	3
WTE/WWT/ PWM 125	Supervision	3
WTE 150	Water Quality Monitoring	3
WTE/WWT 215	Motors/Pumps/Oper/Maintenance	3
<b>Electives (Select 9 10 units)</b>		
WTE/WWT 135	Backflow Prevention	3
WTE/WWT 138	Cross Connection Specialist	3
WTE 197	Water Technology Education Topics	.5-4
WTE 205	Waterworks Distribution II	3
WTE 210	Water Treatment Plant Operation II	3
CE 100*	Cooperative Education	3,4

**TOTAL UNITS 30-31**

\* Cooperative Education must be related to this major.

### COURSE OFFERINGS

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

**WTE 45 Vocational Math Skills for WWT/WTE (3)**  
3 hours lecture

**Note:** Cross listed as WWT 45

Introduction to the basic mathematic skills used in water and wastewater calculations. Particular interest is given to industry-relevant problems and examples.

**WTE 100 Waterworks Distribution (3)**  
3 hours lecture

**Recommended preparation:** WTE/WWT 45

Water utility system operations and maintenance. An introduction to the principles of pressure pipe systems and the hydraulics involved in their operation. Design, installation, operation, and maintenance of basic elements of water systems including pipes, pumps, valves, meters, and related hydraulic units. Operations and maintenance safety considerations emphasized. This course prepares students for the "American Water Works Association" Grade I and Grade II exams.

**WTE 105 Water Treatment Plant Operation I (3)**  
3 hours lecture

**Recommended preparation:** WTE/WWT 45

**Note:** May be taken 2 times

Practical water quality control and treatment with emphasis given to sources of and quality characteristics of natural water; chemistry, public health protection, sanitary practices, and hydraulic principles. Particular attention will be given to basic water treatment plant process and operation. Will be helpful to those preparing for the Grade I and Grade II examination.

**WTE 110 Waterworks Mathematics (3)**  
3 hours lecture

**Recommended preparation:** WTE/WWT 45

**Note:** Cross listed as WWT 110

Provides instruction in entry level to intermediate level mathematical calculations used in the operation and evaluation of conventional water and wastewater treatment processes. The course content has been developed to meet training requirements for entry to intermediate level certification (Grade I III) for water treatment plant operators. Also, it will cover wastewater collection, treatment and disposal. Material will parallel some of the problems found on State Certification examination.

**WTE 120 Instrumentation and Controls (3)**  
3 hours lecture

**Prerequisite:** WTE/WWT 110

**Note:** Cross listed as WWT 120

**Transfer acceptability:** CSU

Introduction to basic electrical theory. Applications and uses of water and wastewater control systems including switches, relays, alarms, motors, instrumentation and telemetering.

**WTE 125 Supervision (3)**  
3 hours lecture

**Note:** Cross listed as WWT/PWM 125

Managerial aspects of public utilities including organization, decision making, coordination, communication, and public relations. Personnel management including recruiting, training, evaluation, discipline, promotion, morale, and grievances. Safety programs and encouraging safe conditions, actions and attitudes.

**WTE 135 Backflow Prevention (3)**  
2½ hours lecture 1½ hours laboratory

**Note:** Cross listed as WWT 135; may be taken 4 times

Concentrated training in recognition and abatement of cross connections in water supply and plumbing systems. Hands on backflow prevention device testing procedures for certification.

**WTE 138 Cross Connection Specialist (3)**  
3 hours lecture

**Recommended preparation:** WTE/WWT 135

**Note:** Cross listed as WWT 138

The study of the various levels of administrative and technical procedures necessary to operate a cross connection control program. Students will obtain the knowledge to become certified as a "Cross Connection Control Specialist" under the provisions set forth by American Water Works Association.

**WTE 150 Water Quality Monitoring (3)**  
2½ hours lecture-1½ hours laboratory

**Recommended preparation:** WWT/WTE 110

Regulatory requirements, proper sampling procedures, basic laboratory methods in order to monitor water quality for regulatory compliance or treatment plant operations.

**WTE 197 Water Technology Education Topics (.5-4)**

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

**Note:** May be taken 4 times

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

**WTE 205 Waterworks Distribution II (3)**

3 hours lecture

**Recommended preparation:** WTE 100 and WTE 110/WWT 110

Intermediate and advanced instruction in the field of water production, types of reservoirs, water lines, pumps, valves, and related appurtenances. Studies design, proper operation, and facilities repair of a public water system. Provides instruction in methods of record keeping and administrative responsibilities related to water systems. This course prepares students for the California Department of Health Services, Water Distribution Operator certification exams at levels D-3, D-4, and D-5 and the "American Water Works Association" certification exams for Grades II, III, and IV.

**WTE 210 Water Treatment Plant Operation II (3)**

3 hours lecture

**Prerequisite:** WTE 105 and WTE 110/WWT 110

Advanced water quality control and treatment with emphasis given to state regulations, EPA regulations, advanced mathematics and chemistry. Particular attention will be given to in depth examination of treatment plant processes and the enforcement of the Surface Water Treatment Rule, Total Coliform Rule, Interim Enhanced Surface Water Treatment Rule, Long Term 1 Enhanced Surface Water Treatment Rule, Long Term 2 Enhanced Surface Water Treatment Rule, and Disinfection/Disinfection by Product Rule. This course will be helpful to those preparing for Grade III and IV examinations.

**WTE 215 Motors and Pumps, Operation and Maintenance (3)**

3 hours lecture

**Recommended preparation:** WTE/WWT 110**Note:** Cross listed as WWT 215

Identification of problems encountered, causes of problems, corrective solutions, and repairs in the operation of pumps and motors. Implementation of maintenance programs including scheduling and recordkeeping.

**Welding (WELD)**

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

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

**PROGRAMS OF STUDY****Entry-Level Gas Metal Arc/  
Flux Cored Arc Welding**

Provides the skills necessary for entry-level employment as a gas metal arc welder/flux cored arc welder.

**CERTIFICATE OF PROFICIENCY**

Program Requirements		Units
IT 100	Technical Mathematics	3
WELD 100	Welding I	3
WELD 120	Gas Metal Arc and Flux Cored Arc Welding	3
WELD 135	Print Reading for Welders	3
WELD 160	Metal Layout for Fabrication	3
<b>TOTAL UNITS</b>		<b>15</b>

**Entry-Level Gas Tungsten Arc Welding**

Provides the skills necessary for entry-level employment as a gas tungsten arc welder.

**CERTIFICATE OF PROFICIENCY**

Program Requirements		Units
IT 100	Technical Mathematics	3
WELD 100	Welding I	3
WELD 115	Gas Tungsten Arc Welding	3
WELD 135	Print Reading for Welders	3
WELD 160	Metal Layout for Fabrication	3
<b>TOTAL UNITS</b>		<b>15</b>

Entry-Level Shielded Metal Arc Welding

Provides the skills necessary for entry-level employment as a shielded metal arc welder.

**CERTIFICATE OF PROFICIENCY**

Program Requirements		Units
IT 100	Technical Mathematics	3
WELD 100	Welding I	3
WELD 135	Print Reading for Welders	3
WELD 160	Metal Layout for Fabrication	3
<b>TOTAL UNITS</b>		<b>12</b>

Welding Technology

Provides training for a career in the field of welding. Following the study of basic welding processes, the student may elect to concentrate in one or more of the basic welding processes and to prepare for the industrial certification test.

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

Program Requirements		Units
IT 100	Technical Mathematics	3
WELD 100	Welding I	3
WELD 110	Shielded Metal Arc Welding	3
WELD 115	Gas Tungsten Arc Welding	3
WELD 120	Gas Metal Arc and Flux Cored Arc Welding	3
WELD 160	Metal Layout for Fabrication	3
WELD 196	Special Problems in Welding	1,2,3
WELD 135	Print Reading for Welders	3
CE 100	Cooperative Education	1,2,3,4
<b>TOTAL UNITS</b>		<b>23 - 28</b>

**COURSE OFFERINGS**

Courses numbered under 50 are non-degree courses.

Courses numbered under 100 are not intended for transfer credit.

**WELD 10L Shielded Metal Arc Welding Laboratory (3)**

6 hours lecture/laboratory

**Note:** May be taken 4 times

Operation of arc welding machines with various electrodes in all positions of welding.

**WELD 15L Gas Tungsten Arc Welding Laboratory (3)**

6 hours lecture/laboratory

**Note:** May be taken 4 times

Operation of Gas Tungsten Arc Welding machines on carbon steel, stainless steel, and aluminum.

**WELD 20L Semiautomatic Arc Welding Laboratory (3)**

6 hours lecture/laboratory

**Note:** May be taken 4 times

Operation of Gas Metal Arc and Flux Cored Arc Welding machines on carbon steel.

**WELD 100 Welding I (3)**

2 hours lecture 4 hours laboratory

**Note:** May be taken 2 times**Transfer acceptability:** CSU

Introduction to safe practices, setup, and operation of oxyfuel cutting and brazing, shielded metal arc welding, gas tungsten arc welding, flux core arc welding, and gas metal arc welding.

**WELD 110 Shielded Metal Arc Welding (3)**

2 hours lecture 4 hours laboratory

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

Welding steel sheet metal, plate, tubing, and pipe. Carbon arc gouging on construction type steels.

**WELD 115 Gas Tungsten Arc Welding (3)**

6 hours lecture/laboratory

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

Safe setup, operation, and maintenance of GTAW welding equipment. Welding stainless steel, carbon steel, and aluminum in the flat and horizontal position.

**WELD 116 Advanced Gas Tungsten Arc Welding (3)**

6 hours lecture/laboratory

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

Safe setup, operation and maintenance of GTAW welding equipment. Welding stainless steel, carbon steel, aluminum, and other exotic metals in all positions according to building codes, military specifications, and aerospace standards.

**WELD 120 Gas Metal Arc and Flux Cored Arc Welding (3)**

2 hours lecture 4 hours laboratory

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

Gas metal arc welding steel and aluminum sheet metal, plate and pipe with short arc and spray arc technique. Flux cored arc welding steel plate in flat, horizontal, and vertical positions.

**WELD 135 Print Reading for Welders (3)**

3 hours lecture

Line interpretation, sketching, bill of materials, structural shapes, welding symbols, joint types, weld types, and metric conversions.

**WELD 140 Qualification of Welders (3)**

2 hours lecture-4 hours laboratory

**Prerequisite:** WELD 101**Note:** May be taken 4 times

This course is designed to train the students to be familiar with the provisions of the various welding standards and codes. Supervised training is provided so that students will be able to qualify for certification on any code or standard.

**WELD 160 Metal Layout for Fabrication (3)**

6 hours lecture/laboratory

**Note:** May be taken 4 times

This course provides students with knowledge of basic layout, fitup, fabrication, safe operation of shop equipment. Parallel line, radial line, and triangulation layout will be taught. Students will work from drawings or sketches to prepare, form, or cut multiple parts for assembly.

**WELD 196 Special Problems in Welding (1,2,3)**

3, 6 or 9 hours laboratory

**Prerequisite:** Completion of, or concurrent enrollment in, WELD 100**Note:** May be taken 4 times

This course is designed to aid the student in the enrichment of the area of concentration in welding and is of a research nature. Content to be determined by the need of the student under signed contract with the instructor.

**Women's Studies**

Contact the Behavioral Sciences Department for further information, (760) 744-1150, ext. 2330

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

**PROGRAM OF STUDY****Women's Studies**

This major offers the student an opportunity to study women and their contributions from a female perspective. It also provides intensive, interdisciplinary lower-division preparation necessary for pursuing advanced coursework in Women's Studies. Transfer students should consult the four-year college or university catalog for specific requirements.

**A.A. DEGREE MAJOR**

Program Requirements		Units
SOC 115	Introduction to Women's Studies	3
<b>Electives (Select a minimum of 15 units)</b>		
AIS 165	Native Women in the Americas	3
COMM 105	Human Values in the Mass Media	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 Women	3
PSYC/SOC 145	Psychology and Sociology of Aging	3
<b>TOTAL UNITS</b>		<b>18</b>

Recommended Electives: ENG 100 and 202 with emphasis in Women's Studies issues.

**Zoology (ZOO)**

Contact the Life Sciences Department for further information, (760) 744-1150, ext. 2275

**COURSE OFFERINGS****ZOO 100 General Zoology (4)**

3 hours lecture 3 hours laboratory

**Note:** Not open to students with prior credit in ZOO 101 or 101L**Transfer acceptability:** CSU; UC – No credit if taken after ZOO 101/101L; CAN BIOL 4

Principles of animal life and body organization. Structural and functional adaptations of major groups of the animal kingdom from protozoans through mammals. This is a general education course intended for non-science majors.

**ZOO 101 Animal Kingdom (3)**

3 hours lecture

**Note:** Not open to students with prior credit in ZOO 100**Transfer acceptability:** CSU; UC – No credit if taken after ZOO 100

Structural and functional adaptations of major groups of the animal kingdom from protozoans through mammals. ZOO 101L laboratory optional.

**ZOO 101L Animal Kingdom Laboratory (1)**

3 hours laboratory

**Prerequisite:** Completion of, or concurrent enrollment in, ZOO 101**Note:** Not open to students with prior credit in ZOO 100**Transfer acceptability:** CSU; UC – No credit for ZOO 101/101L if taken after 100

Investigations upon living and preserved specimens representative of the major groups of the animal kingdom. This is a general education course intended for non-science majors.

- ZOO 115 Natural History of Animal Life (4)**  
 3 hours lecture 3 hours laboratory  
**Note:** Not open to students with prior credit in ZOO 116 or 116L  
**Transfer acceptability:** CSU; UC – ZOO 115, 116/116L combined: maximum credit, 4 units  
 Consideration of the natural history, adaptations, ecology, behavior, and distribution of animals with reference to major groups of both vertebrates and invertebrates. Weekend field trips are required.
- ZOO 116 Natural History of Animal Life (Lecture) (3)**  
 3 hours lecture  
**Note:** Not open to students with prior credit in ZOO 115  
**Transfer acceptability:** CSU; UC – ZOO 115, 116/116L combined: maximum credit, 4 units  
 Consideration of the natural history, adaptations, ecology, behavior, and distribution of animals with reference to major groups of both invertebrates and vertebrates
- ZOO 116L Natural History of Animal Life (Laboratory) (1)**  
 3 hours laboratory  
**Prerequisite:** Completion of, or concurrent enrollment in, ZOO 116  
**Note:** Not open to students with prior credit in ZOO 115  
**Transfer acceptability:** CSU; UC – ZOO 115, 116/116L combined: maximum credit, 4 units  
 The radiative adaptation of representative animals to various habitats and modes of life; field observation of major fauna of littoral, chaparral, desert, and mountain environments. Weekend field trips are required.
- ZOO 120 Animal Behavior (3)**  
 3 hours lecture  
**Transfer acceptability:** CSU; UC  
 Biological basis of behavior including behavior genetics, operation of evolutionary processes on species typical behaviors, behavioral ontogeny, functional organization of nervous systems, animal senses, motivation including hormonal effects on drive, and biorhythms; behavioral ecology including social behavior and social living, reproductive behaviors, homing and migration, antipredatory defenses, feeding strategies, and communication.
- ZOO 135 Marine Mammals: Biology and Ecology (3)**  
 3 hours lecture  
**Note:** Cross listed as BIOL 135  
**Transfer acceptability:** CSU; UC  
 Basic biology and ecology of marine mammals. Special emphasis on behavior, adaptations, and conservation.
- ZOO 145 Introduction to Anatomy and Physiology (3)**  
 3 hours lecture  
**Note:** Not open to students with prior credit in ZOO 200, 203 and 205  
**Transfer acceptability:** CSU; UC – ZOO 145/145L and BIOL 106/106L or BIOL 105 combined: maximum credit, 4 units; UC – No credit for ZOO 145/145L if taken after ZOO 203, 205/205L, or 200  
 Introduction to the structure and function of human body systems in health and disease. Not recommended for those intending to take BIOL 105, 106, ZOO 200, 203, or 205.
- ZOO 145L Introduction to Anatomy and Physiology Laboratory (1)**  
 3 hours laboratory  
**Prerequisite:** Completion of, or concurrent enrollment in, ZOO 145  
**Transfer acceptability:** CSU; UC – ZOO 145/145L and BIOL 106/106L or BIOL 105 combined: maximum credit, 4 units; UC – No credit for ZOO 145/145L if taken after ZOO 203, 205/205L, or 200  
 Introduction to the structure and function of human body systems. Includes study of cells, tissues, and human organ systems. Not recommended for those intending to take BIOL 105, 105L, 106, ZOO 200, 203, 205, or 205L.
- ZOO 195A Field Study of Marine Invertebrates (1,2,3)**  
 2, 4, or 6 hours lecture/laboratory  
**Note:** Fee charged; may be taken 4 times  
**Transfer acceptability:** CSU; UC – ZOO 195A-F combined: maximum credit, 2 courses  
 Extended field study of the fauna of marine intertidal and subtidal habitats of selected geographic regions, with emphasis upon field identification, observation and interpretation of behavioral and ecological interrelationships of animals to their environment and to one another. See Class Schedule for locality to be visited.
- ZOO 195B Field Study of Marine Vertebrates (1,2,3)**  
 2, 4, or 6 hours lecture/laboratory  
**Note:** Fee charged; may be taken 4 times  
**Transfer acceptability:** CSU; UC – ZOO 195A-F combined: maximum credit, 2 courses  
 Extended field study fishes and marine reptiles and mammals, with emphasis upon identification, behavior, and adaptations. See Class Schedule for locality to be visited.
- ZOO 195C Field Study of Terrestrial Vertebrates (1,2,3)**  
 2, 4, or 6 hours lecture/laboratory  
**Note:** Fee charged; may be taken 4 times  
**Transfer acceptability:** CSU; UC – ZOO 195A-F combined: maximum credit, 2 courses  
 Extended field study of terrestrial mammals, reptiles, and amphibians, emphasizing identification, behavior, adaptations, and ecology. See Class Schedule for locality to be visited.
- ZOO 195D Field Study of Birds (1,2,3)**  
 2, 4, or 6 hours lecture/laboratory  
**Note:** Fee charged; may be taken 4 times  
**Transfer acceptability:** CSU; UC – ZOO 195A-F combined: maximum credit, 2 courses  
 Extended field study of terrestrial and aquatic avifauna of selected habitats, emphasizing identification and observation of native and migratory birds, their behavior, and adaptations. See Class Schedule for locality to be visited.
- ZOO 195E Field Study of Terrestrial and Aquatic Invertebrates (1,2,3)**  
 2, 4, or 6 hours lecture/laboratory  
**Note:** Fee charged; may be taken 4 times  
**Transfer acceptability:** CSU; UC – ZOO 195A-F combined: maximum credit, 2 courses  
 Extended field study of the land and freshwater invertebrate life of selected areas, emphasizing taxonomic identification, behavior, and ecological relationships. See Class Schedule for locality to be visited.
- ZOO 195F Field Studies in Animal Ecology (1,2,3)**  
 2, 4, or 6 hours lecture/laboratory  
**Note:** Fee charged; may be taken 4 times  
**Transfer acceptability:** CSU; UC – ZOO 195A-F combined: maximum credit, 2 courses  
 Extended field studies of the fauna of selected ecosystems, emphasizing identification of animal species and observations upon their interspecific and conspecific interactions and ecological relationships with flora. See Class Schedule for locality to be visited.
- ZOO 197 Zoology Topics (.5-4)**  
 Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture, laboratory, or lecture/laboratory may be scheduled by the department. Refer to Class Schedule.  
**Note:** May be taken 4 times  
**Transfer acceptability:** CSU; UC – Credit determined by UC upon review of course syllabus.  
 Topics in Zoology. See Class Schedule for specific topic offered. Course title will designate subject covered.



**ZOO 200 Anatomy (5)**  
 3 hours lecture 6 hours laboratory  
**Prerequisite:** BIOL 102; or BIOL 200; or BIOL 100; or BIOL 101 and 101L; or BIOL 105; or BIOL 106 and BIOL 106L  
**Transfer acceptability:** CSU; UC – ZOO 200, 203, 205/205L combined: maximum credit, 10 units; CAN BIOL 10; ZOO 200+203 =CAN BIOL SEQ B  
 Designed to provide a basic understanding of the structure of the human body. Laboratory study includes a study of anatomy through cat and organ dissection, skeletal study, use of human models and other visual aids.

**ZOO 203 Physiology (5)**  
 3 hours lecture 6 hours laboratory  
**Prerequisite:** BIOL 102; or BIOL 200 and CHEM 100; or BIOL 100 and CHEM 100; or BIOL 105 and CHEM 100  
**Note:** Not open to students with prior credit in ZOO 205 and/or 205L  
**Transfer acceptability:** CSU; UC – ZOO 200, 203, 205/205L combined: maximum credit, 10 units; UC – ZOO 203 and 205/205L combined: maximum credit, 5 units; CAN BIOL 12; ZOO 200+203= CAN SEQ B  
 Principles of human physiology including laboratory exercises. Deals with physiology of muscle, nerve, circulation, respiration, excretion, digestion, the endocrines and exercise.

**ZOO 205 Physiology Lecture (3)**  
 3 hours lecture  
**Prerequisite:** BIOL 102; or BIOL 200 and CHEM 100; or BIOL 100 and CHEM 100; or BIOL 105 and CHEM 100  
**Note:** Not open to students with prior credit in ZOO 203  
**Transfer acceptability:** CSU; UC – ZOO 200, 203, 205/205L combined: maximum credit, 10 units; UC – ZOO 203 and 205/205L combined: maximum credit, 5 units  
 Principles of human physiology. Deals with physiology of muscle, nerve, circulation, respiration, excretion, digestion, the endocrines and exercise.

**ZOO 205L Physiology Laboratory (2)**  
 6 hours laboratory  
**Prerequisite:** Completion of, or concurrent enrollment in, ZOO 205  
**Note:** Not open to students with prior credit in ZOO 203  
**Transfer acceptability:** CSU; UC – ZOO 200, 203, 205/205L combined: maximum credit, 10 units; UC – ZOO 203 and 205/205L combined: maximum credit, 5 units  
 Laboratory exercises in principles of human physiology. Deals with physiology of muscle, nerve, circulation, respiration, excretion, digestion, the endocrines and exercise.

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

## Regional Occupational Program (ROP)

Palomar College, under contract with the San Diego County Office of Education, offers vocational and technical training through the Regional Occupational Program.

Courses provided through ROP are available to college and high school students, out-of-school youths, and adults residing in San Diego County. Courses can be used for basic job skills, upgrading of existing skills, or changing occupations. Units earned may be used for high school or college credit. ROP courses taken for college credit may be applied toward Palomar College Certificates/Degrees. For more information, contact the ROP Office in AA 136 or call (760) 744 1150, ext. 2293.

## Air Conditioning, Heating and Refrigeration (R ACR)

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

### PROGRAM OF STUDY

### Air Conditioning, Heating and Refrigeration

Prepares students for entry-level positions as air conditioning, heating, and refrigeration technicians. Also provides retraining and upgrading of skills for maintenance technicians, including EPA certification.

In order to earn a certificate, students must achieve a minimum grade of 'C' in each of the certificate program courses.

### CERTIFICATE OF PROFICIENCY

Program Requirements		Units
R ARC 50	AC, Heating, and Refrigeration: Electrical	4
R ACR 55	AC, Heating, and Refrigeration: Mechanical	4
R ACR 56	Adv AC/Heating/Refrigeration	4
R ARC 58	Refrigerant Recovery	1
<b>TOTAL UNITS</b>		<b>13</b>

### COURSE OFFERINGS

Courses taken for college credit may be applied toward a certificate or an Associate in Arts degree.

Courses numbered under 100 are not intended for transfer credit.

**R ACR 50 Air Conditioning, Heating and Refrigeration: Electrical (4)**

8 hours lecture/laboratory  
**Note:** Graded only; may be taken 2 times  
 Introduction to the fundamentals and application of electrical theory as related to air conditioning, heating and refrigeration. Study of basic electrical theory, alternating current, electrical controls, motors, schematics, and electrical meters.

**R ACR 55 Air Conditioning, Heating and Refrigeration: Mechanical (4)**

8 hours lecture/laboratory  
**Note:** Graded only; may be taken 2 times  
 Introduction to basic mechanical theory of air conditioning, heating and refrigeration. Application of principles and techniques to include system components and their interrelated functions, safety procedures, tools, and equipment.

**R ACR 56 Advanced Air Conditioning, Heating and Refrigeration (4)**

8 hours lecture/laboratory  
**Prerequisite:** R ACR 50 and 55  
**Note:** Graded only; may be taken 2 times  
 Advanced principles and techniques of air conditioning, heating and refrigeration. EPA regulations and safety requirements; complex control systems; gas furnace combustion and air requirements; and the installation, troubleshooting, repair, and maintenance of residential and small commercial units.

**R ACR 58 Refrigerant Recovery (1)**

2 hours lecture/laboratory  
**Note:** Graded only; may be taken 2 times  
 Basic understanding of the United States Environmental Protection Agency regula-

tions as set forth under Section 608 of the Clean Air Act of 1990, which described requirements for recycling ozone-depleting refrigerants. Preparation to take the EPA certification exam, which is administered at the conclusion of the course.

**RACR 97 Air Conditioning, Heating, and Refrigeration Topics (.5-4)**

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

**Note:** Graded only; may be taken 4 times

Topics in Air Conditioning, Heating, and Refrigeration. See Class Schedule for specific topic offered. Course title will designate subject covered.

## Automotive Technology (R AT)

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

### PROGRAM OF STUDY

#### Auto Body Work

In order to earn a certificate, students must achieve a minimum grade of 'C' in each of the certificate program courses.

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

Program Requirements		Units
RAT 50	Auto Body Repair I	4
RAT 51	Auto Body Repair II	4
RAT 55	Auto Refinishing I	4
RAT 56	Auto Refinishing II	4
Elective Courses (Select 6 Units)		
AT 100	Auto Maintenance and Minor Repair	3
AT 105	Automotive Electricity	2
CE 100	Cooperative Education	1,2,3,4
IT 100	Technical Mathematics	3
WELD 100	Welding I	2
CE 100	Cooperative Education	1,2,3,4
<b>TOTAL UNITS</b>		<b>22</b>

Auto Body Work A.A. Degree or Certificate of Achievement is also listed under Automotive Technology.

### COURSE OFFERINGS

Courses taken for college credit may be applied toward a certificate or an Associate in Arts degree.

Courses numbered under 100 are not intended for transfer credit.

**RAT 50 Auto Body Repair I (4)**  
8 hours lecture/laboratory

**Note:** Graded only; may be taken 3 times

Automotive body work with emphasis on repair. Includes welding; working with small damage points; restoring contour of body panels and sections; and realigning bumpers, fenders, doors, and hoods.

**RAT 51 Auto Body Repair II (4)**  
8 hours lecture/laboratory

**Recommended preparation:** RAT 50

**Note:** Graded only; may be taken 3 times

Automotive body work with emphasis on increasing diagnostic, estimating and

repair skills and updating techniques and related technologies. Introduction to collision industry standards including I-CAR and ASE.

**RAT 55 Auto Refinishing I (4)**  
8 hours lecture/laboratory

**Note:** Graded only; may be taken 3 times

Introduction to auto refinishing. Preparation of auto surfaces for refinishing: tapping, cleaning, and sanding. Refinishing auto surfaces: sanding, application of primers and paint.

**RAT 56 Auto Refinishing II (4)**  
8 hours lecture/laboratory

**Recommended preparation:** RAT 55

**Note:** Graded only; may be taken 3 times

Skills development in automotive refinishing techniques including base-coat clear-coat application. Color matching concepts. Identification, prevention and correction of painting problems. Update on new products, techniques, and trends.

**RAT 90 Automotive Upholstery (4)**  
8 hours lecture/laboratory

**Note:** Cross listed as R UP 90; graded only; may be taken 2 times

Skills and techniques required to replace, repair or customize automotive and related upholstery. Fabrication of interiors and accessories for automobile interiors, watercraft and other recreational vehicles. Techniques and considerations related to auto alarm or sound system installation. Students will complete individual or group projects.

**RAT 97 Auto Body Repair/Auto Refinishing Topics (.5-4)**

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

**Note:** Graded only; may be taken 4 times

Topics in auto body repair and auto refinishing. See Class Schedule for specific topic offered. Course title will designate subject covered.

## Computer Science and Information Systems (R CSIS)

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

### PROGRAMS OF STUDY

#### Applications Support Specialist

This program prepares students for employment as technicians supporting software applications such as Microsoft Office Suite in a help desk environment. Building on applications proficiency, it includes supporting coursework in computer hardware, operating systems, web site development and customer support fundamentals.

In order to earn a certificate, students must achieve a minimum grade of 'C' in each of the certificate program courses.

### CERTIFICATE OF PROFICIENCY

Program Requirements		Units
R CSIS 65	Help Desk Fundamentals	2
R CSIS/CSIS 120	Microcomputer Applications	3
R CSIS/CSIS 137	Web Site Development with XHTML	2
R CSIS 157 or R CSIS 158	Windows XP: Professional/Server Windows 2000	3
R CSIS/CSIS 170	Windows	1
R CSIS 172	Windows for Technicians	2
<b>TOTAL UNITS</b>		<b>13</b>

## Computer Technology

This program prepares students for employment in various areas of business and industry requiring technical support for stand-alone and networked computer systems. It is designed to provide the basics of computer hardware and software theory and application, familiarity with a variety of operating systems and the fundamentals of networking. Hands-on labs with an emphasis on problem-solving and troubleshooting provide opportunities for the application of theoretical knowledge to real and simulated system malfunctions.

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

Program Requirements	Units
R CSIS/CSIS 120 Microcomputer Applications	3
R CSIS 140 Command Line Operations	3
R CSIS/CSIS 145 Introduction to Linux	3
R CSIS 155 Computer Technology – Hardware	3
R CSIS 156 or Computer Technology – Software	
CSIS 108 Hardware and O.S. Fundamentals	3
R CSIS 157 Windows XP: Professional/Server	3
R CSIS 158 or Windows 2000	
CSIS 162 and Windows Client	3
CSIS 163 Windows Server	3
R CSIS 160 or Introduction to Local Area Networking	3
CSIS 111 Networking Fundamentals	3
R CSIS 172 Windows for Technicians	2
<b>Electives (Select a minimum of 6 units)</b>	
R CSIS 65 Help Desk Fundamentals	2
R CSIS/CSIS 137 Web Site Development with XHTML	2
R CSIS 159 Industry Certification: Review and Prep	1
CSIS 160 Survey of Computer Science	4
R CSIS 161 PC/Network Security	3
R CSIS 169 Overview of Computer Forensics	3
ECHT 100 Electronic Components and Circuits	4.5
ECHT 203 Digital/Computer Electronics	4.5
<b>TOTAL UNITS</b>	<b>31-35</b>

## Microcomputer Operating Systems

Prepares students for employment in various areas of microcomputer support, specifically operating systems and software installation and support. Focus on client and server applications of Microsoft Windows user and server operating systems. Includes evolution of operating systems, upgrade and transition to emerging industry standards.

In order to earn a certificate, students must achieve a minimum grade of 'C' in each of the certificate program courses.

### CERTIFICATE OF PROFICIENCY

Program Requirements	Units
R CSIS 140 Command Line Operations	3
R CSIS 158 Windows 2000	3
R CSIS/CSIS 170 Windows	1
R CSIS 172 Windows for Technicians	2
R CSIS 157 Windows XP; Professional and Server	3
<b>TOTAL UNITS</b>	<b>12</b>

## Microcomputer Technology

Prepares students for entry-level positions supporting, maintaining and repairing stand-alone and networked microcomputer systems.

In order to earn a certificate, students must achieve a minimum grade of 'C' in each of the certificate program courses.

### CERTIFICATE OF PROFICIENCY

Program Requirements	Units
R CSIS 140 Command Line Operations	3
R CSIS 155 Computer Technology - Hardware	3
R CSIS 156 Computer Technology - Software	3
R CSIS 160 Introduction to Local Area Networking	3
<b>TOTAL UNITS</b>	<b>12</b>

## PC Repair Technician

Prepares students for mid-level positions as PC Repair Technician. Focus on microcomputer structure and Windows operating system. Students will develop skills in component identification, preparation and setup; memory system and repair; power supplies; multiple hard disk preparation, testing and installation; current technology trends and troubleshooting and customer relations.

In order to earn a certificate, students must achieve a minimum grade of 'C' in each of the certificate program courses.

### CERTIFICATE OF PROFICIENCY

Program Requirements	Units
R CSIS 156 Computer Technology - Software	3
R CSIS 159 Industry Certification: Review & Preparation	1
R CSIS 172 Windows for Technicians	2
<b>TOTAL UNITS</b>	<b>6</b>

## PC Support Technician

Prepares students for entry-level positions as PC Support Technician. Instructional focus on installation, upgrade, maintenance, and repair of microcomputers to the modular level.

In order to earn a certificate, students must achieve a minimum grade of 'C' in each of the certificate program courses.

### CERTIFICATE OF PROFICIENCY

Program Requirements	Units
R CSIS 140 Command Line Operations	3
R CSIS 155 Computer Technology - Hardware	3
<b>TOTAL UNITS</b>	<b>6</b>

## Software Applications Specialist

Prepares students for employment in positions that require competence in software applications common to business and industry.

In order to earn a certificate, students must achieve a minimum grade of 'C' in each of the certificate program courses.

### CERTIFICATE OF PROFICIENCY

Program Requirement	Units
R CSIS/CSIS 120 Microcomputer Applications	3
R CSIS 121 Microcomputer Applications – Advanced	3
R CSIS/CSIS 137 or Web Site Development with XHTML	
R CSIS 138 Website Design with FrontPage	2
R CSIS/CSIS 170 Windows	1
R CSIS 186 Contemporary Job Search	1
<b>TOTAL UNITS</b>	<b>10</b>

## COURSE OFFERINGS

Courses taken for college credit may be applied toward a certificate or an Associate in Arts degree.

Courses numbered under 100 are not intended for transfer credit.

**R CSIS 65 Help Desk Fundamentals (2)**  
4 hours lecture/laboratory

**Recommended preparation:** R CSIS 121 and 172 or 157 or 158

**Note:** Graded only

A comprehensive overview of the Help Desk environment. Builds on basic software and hardware knowledge to provide entry-level training in computer user support. Includes critical skills in professionalism; communication; call management, customer service and related job stress. Hands-on simulations enable students to identify and troubleshoot a variety of commonly occurring problems.

**R CSIS 97 Computer Science and Information Systems Topics (1.5-4)**

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

**Note:** Graded only; may be taken 4 times

Topics in Computer Science and Information Systems. See Class Schedule for specific topic offered. Course title will designate subject covered.

**R CSIS 116 Introduction to Computers (2)**  
1 hour lecture-2 hours lecture/laboratory

**Note:** Graded only

**Transfer acceptability:** CSU

Introduction to basic computer operations and the Windows operating system for students with little or no background in computer science. Includes terminology and techniques as well as keyboarding and mouse functions. Also includes: window management; creating and managing files and folders; performing basic system maintenance using Windows accessory programs; word processing; and accessing the Internet.

**R CSIS 120 Microcomputer Applications (3)**  
1 hour lecture 4 hours lecture/laboratory

**Note:** Cross listed as CSIS 120; graded only; may be taken 4 times; maximum of 4 completions in any combination of CSIS/R CSIS 120, CSIS 121

**Transfer acceptability:** CSU

Hands on experience with microcomputers and microcomputer applications featuring the use of Windows, word processing, spreadsheet, database, and presentation graphics software.

**R CSIS 121 Microcomputer Applications - Advanced (3)**  
1 hour lecture, 4 hours lecture/laboratory

**Prerequisite:** R CSIS/CSIS 120

**Note:** Graded only; may be taken 2 times

**Transfer acceptability:** CSU

This course builds upon fundamental knowledge of Windows operating system and Microsoft Office Suite (Word, Excel, Access and PowerPoint) to progress into advanced functions of each element as well as integration of various elements.

**R CSIS 125 Presenting with PowerPoint (1)**  
2 hours lecture/laboratory

**Recommended preparation:** R CSIS/CSIS 170

**Note:** Graded only

**Transfer acceptability:** CSU

Comprehensive study and application of PowerPoint multimedia capabilities to create effective audience-focused presentations, live and web-based. Preparation of documents in various formats to include: animated slideshows, speaker notes, audience handouts, outlines and web sites.

**R CSIS 127 Word Processing Software – Basic (1)**  
2 hours lecture/laboratory

**Recommended preparation:** A keyboarding speed of 20 net words a minute

**Note:** Graded only; may be taken 4 times

**Transfer acceptability:** CSU

Study of word processing skills using Microsoft Office. Course includes file creation, modification, and formatting, saving and printing files, graphics, report generation elements, and integration of Word documents within the Office suite. Hands-on labs using state of the art software are an integral part of this course, as well as guided instruction.

**R CSIS 130 Microsoft Publisher (1)**  
2 hours lecture/laboratory

**Recommended preparation:** R CSIS 170 and R CSIS 127 or BUS 170 or OIS 136.I

**Note:** Cross listed as BUS 186; graded only, may be taken 4 times.

Hands-on applications of Microsoft Publisher, a comprehensive software package that combines text, graphics, illustrations, and photographs to produce typeset quality documents for local printer output or commercial printing. Includes: newsletters; brochures; flyers; web pages; business cards; letterheads and envelopes; advertising and marketing materials; greeting cards; PDF and web file formats; and printing options.

**R CSIS 137 Web Site Development with XHTML (2)**  
4 hours lecture/laboratory

**Note:** Cross listed as CSIS 137; graded only

**Transfer acceptability:** CSU

This course provides a foundation to Internet/Intranet technologies. This course primarily teaches the skills required to develop and publish web sites utilizing XHTML, including using HTML tables, frames, web page forms, and basic CSS (Cascading Style Sheets).

**R CSIS 138 Website Design with FrontPage (2)**  
4 hours lecture/laboratory

**Recommended preparation:** R CSIS/CSIS 137

**Note:** Graded only

Comprehensive study of web site development and maintenance using Microsoft FrontPage. Includes creation of web pages, application of design elements; comparison of search engines, familiarity with source code, and use of interactive forms to create client databases. Also includes uploading, testing and modification of web site.

**R CSIS 140 Command Line Operations (3)**  
6 hours lecture/laboratory

**Note:** Graded only

Introduction to the basic principles of computer operating systems and command line operations, using DOS (Disk Operating System) as a foundation. Includes: introduction to computer hardware; comparative overview of operating systems, managing files, disks and directories; batch files; controlling peripherals; disk maintenance, optimization and data recovery; and configuring system environment.

**R CSIS 145 Introduction to Linux (3)**  
6 hours lecture/laboratory

**Note:** Cross listed as CSIS 145; graded only

**Transfer acceptability:** CSU

An overview of the Linux operating system, utilities, and associated applications for workstations. Includes installation, configuration and troubleshooting of Linux Systems within the command-line environment and the graphical X-Windows environment.

**R CSIS 150 Computer Spreadsheets (3)**  
6 hours lecture/laboratory

**Note:** Graded only

**Transfer acceptability:** CSU

In-depth study of the varied applications of spreadsheets using Microsoft Excel. Create, modify, format and maintain multiple page worksheets; enter numeric and text data for manipulation; and create and copy formulas. Includes integration of Excel spreadsheets within Microsoft Office Suite. Hands-on experience in networked lab.

- R CSIS 155 Computer Technology – Hardware** (3)  
6 hours lecture/laboratory  
**Note:** Graded only; may be taken 2 times  
Introduction to the basic principles of computer hardware architecture and design. Hands-on course includes microcomputer design, assembly and troubleshooting. Course content aligns with objectives of the A+ certification core exam.
- R CSIS 156 Computer Technology – Software** (3)  
6 hours lecture/laboratory  
**Note:** Graded only; may be taken 2 times  
**Prerequisite:** R CSIS 140  
Fundamentals of computer operating systems and Local Area Network (LAN). Hands-on approach to installing, troubleshooting, and supporting operating systems, networking fundamentals, and preparation for the A+ OS certification exam.
- R CSIS 157 Windows XP: Professional and Server** (3)  
6 hours lecture/laboratory  
**Recommended preparation:** R CSIS/CSIS 170  
**Note:** Graded only; may be taken 2 times  
**Transfer acceptability:** CSU  
A focused study of Microsoft Windows XP Professional and Server operating systems. Includes hands-on experience installing, configuring, optimizing, maintaining and troubleshooting Windows XP Professional on stand-alone and client computers in workgroup or domain environment. Study of Windows.NET Server includes setup and configuration of Active Directory Service.
- R CSIS 158 Windows 2000** (3)  
6 hours lecture/laboratory  
**Recommended preparation:** R CSIS/CSIS 170  
**Note:** Graded only; may be taken 2 times  
Core knowledge and skills for supporting Microsoft Windows 2000 operating system. Includes installing, configuring, customizing, optimizing, networking, integrating, and troubleshooting.
- R CSIS 159 Industry Certification: Review and Preparation** (1)  
2 hours lecture/laboratory  
**Note:** Graded only; may be taken 2 times  
A focused study of industry and professional certifications available for PC technicians. Review of Microsoft, Novell, and CTIA certification programs. Content review and preparation for A+ Certification Examination.
- R CSIS 160 Introduction to Local Area Networking** (3)  
6 hours lecture/laboratory  
**Prerequisite:** R CSIS 155 and 156  
**Note:** Graded only; may be taken 2 times  
Introduction to the basic principles of Local Area Networking (LAN) structure and function. Hands-on experience in design, construction, installation, maintenance and repair to the modular level using operating systems and diagnostic hardware and software.
- R CSIS 161 PC/Network Security** (3)  
6 hours lecture/laboratory  
**Note:** Graded only  
**Transfer acceptability:** UC  
Comprehensive overview of computer security, including stand-alone and networked systems. Includes: fundamentals of network security principles and implementation; e-mail, web and data transmission security; infrastructure security; cryptography; and operational/ organizational security, including disaster recovery.
- R CSIS 169 Overview of Computer Forensics** (3)  
6 hours lecture/laboratory  
**Prerequisite:** R CSIS 161  
**Note:** Graded only  
Introduction to computer forensics and investigation including digital information recovery and analysis. Includes hands-on exercises, case studies and discussion of computer forensic ethics. Course content aligns with the objectives of the International Association of Computer Investigative Specialists (IACIS) certification.
- R CSIS 170 Windows** (1)  
2 hours lecture/laboratory  
**Note:** Cross listed as CSIS 170; graded only  
**Transfer acceptability:** CSU  
Fundamentals of Windows Graphical User Interface. Students will develop proficiency in: changing desktop settings; file/folder management at both desktop and Explorer levels; and basic system maintenance.
- R CSIS 172 Windows for Technicians** (2)  
4 hours lecture/laboratory  
**Recommended preparation:** R CSIS/CSIS 170  
**Note:** May be taken 2 times; graded only  
A technical study of the Windows operating system; hands-on experience installing, configuring, optimizing, maintaining, and troubleshooting.
- R CSIS 175 Excel** (1)  
2 hours lecture/laboratory  
**Note:** Graded only; may be taken 2 times; graded only  
**Transfer acceptability:** CSU  
Study of spreadsheets using Microsoft Excel. Course includes creating spreadsheets, formatting data, manipulating data, creation and application of formulas, charting data, and printing considerations. Preparation for the Excel MOS certification exam.
- R CSIS 180 Access** (1)  
2 hours lecture/laboratory  
**Note:** Graded only; may be taken 2 times  
**Transfer acceptability:** CSU  
Study of Access database program within the Microsoft Office Suite. This class introduces and reinforces the creation, modification and maintenance of Access databases. Students will create the database structure, enter data in tables, execute queries, generate reports and forms, modify properties and layout at the design level and maintain the database. Preparation for the Access MOUS certification exam.
- R CSIS 186 Contemporary Job Search Techniques** (1)  
2 hours lecture/laboratory  
**Note:** Graded only  
Use the Internet, current software and research tools to organize and implement a job search. Includes: on-line resources; preparation and posting of application materials, including resume and cover letters; interview strategies and mock interviews; industry speakers, and hard copy and online portfolios.

## Culinary Arts (R CUL)

See also Culinary Arts

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

### PROGRAMS OF STUDY

#### Culinary Arts

Prepares students for employment and career opportunities in various areas of the foodservice industry. The focus is on food preparation and production skills, with supporting coursework in nutrition, food sanitation and safety, menu planning, purchasing and inventory control, kitchen management and employee supervision. Practical hands-on lab activities in a commercial kitchen environment and directed workplace learning opportunities prepare students for foodservice positions in resorts, casinos, and fine dining establishments.

Students will need to possess a current San Diego County Food Handler Card to participate in kitchen/lab activities.

In order to earn a certificate or degree, students must achieve a minimum grade of 'C' in each of the certificate program courses.

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

Program Requirements	Units
FCS/MICR 110 Microbiology and Foods	3
FCS/HE 165 Fundamentals of Nutrition	3
R CUL/CUL 110 Culinary Essentials I	3
R CUL/CUL 111 Culinary Essentials II	3
R CUL/CUL 120 Patisserie and Baking I	3
R CUL/CUL 121 Patisserie and Baking II	3
R CUL/CUL 130 Pantry/Garde Manger	3
R CSIS/CSIS 120 Microcomputer Applications	3
R CUL/CUL 200 Menu Planning and Purchasing	2
R CUL/CUL 210 Foodservice Management	3
R CUL/CUL 220 Catering and Event Planning	3
R CUL/CUL 298 Culinary Directed Practice I	3
R CUL/CUL 299 Culinary Directed Practice II	3
<b>Electives (Select a minimum of 3 units)</b>	
R CUL/CUL 115 Dining Room Service	2
R CUL/CUL 150 International Cuisine	3
R CUL/CUL 230 Adv Garde Manger/Competition	3
R CUL/CUL 240 Wines and Affinities	1
<b>TOTAL UNITS</b>	<b>41</b>

### Culinary Skills

With a focus on basic food preparation and production skills, nutrition, and food safety and sanitation, the program prepares students for various entry-level positions in the foodservice industry. Practical hands-on lab activities in a modern commercial kitchen environment provide opportunities for students to master the skills required for employment.

Students will need to possess a current San Diego County Food Handler Card to participate in required kitchen/lab activities.

In order to earn a certificate, students must achieve a minimum grade of 'C' in each of the certificate program courses.

### CERTIFICATE OF PROFICIENCY

Program Requirements	Units
FCS/MICR 110 Microbiology and Foods	3
FCS/HE 165 Fundamentals of Nutrition	3
R CUL/CUL 110 Culinary Essentials I	3
R CUL/CUL 111 Culinary Essentials II	3
R CUL/CUL 130 Pantry/Garde Manger	3
R CUL/CUL 115 Dining Room Service	2
<b>TOTAL UNITS</b>	<b>17</b>

### Patisserie and Baking

With a focus on commercial baking and pastry making, the program prepares students for entry-level positions in bakeries, restaurants, resorts and casino operations. Practical hands-on lab activities in a modern commercial kitchen environment provide opportunities for students to master the skills required for employment.

Students will need to possess a current San Diego County Food Handler Card to participate in required kitchen/lab activities.

In order to earn a certificate, students must achieve a minimum grade of 'C' in each of the certificate program courses.

### CERTIFICATE OF PROFICIENCY

Program Requirements	Units
FCS/MICR 110 Microbiology and Foods	3
FCS/HE 165 Fundamentals of Nutrition	3
R CUL/CUL 120 Patisserie and Baking I	3
R CUL/CUL 121 Patisserie and Baking II	3
<b>TOTAL UNITS</b>	<b>12</b>

### COURSE OFFERINGS

Courses taken for college credit may be applied toward a certificate or an Associate in Arts degree.

<b>R CUL 110 Culinary Essentials I</b>	<b>(3)</b>
<i>1 hour lecture - 4 hours laboratory</i>	
<b>Prerequisite:</b> Current San Diego County Food Handler Card	
<b>Recommended preparation:</b> FCS/MICR 110	
<b>Note:</b> Cross listed as CUL 110; graded only	
<b>Transfer acceptability:</b> CSU	

Introduction to culinary arts and the foodservice industry. Fundamentals of food preparation and production, emphasizing industry standards. Lab work will focus on knife skills, standard cuts, and preparation of vegetables and starches. Students will be expected to meet high standards of professionalism, sanitation and work habits.

<b>R CUL 111 Culinary Essentials II</b>	<b>(3)</b>
<i>1 hour lecture - 4 hours lecture/laboratory</i>	
<b>Prerequisite:</b> R CUL/CUL 110	
<b>Note:</b> Cross listed as CUL 111; graded only	
<b>Transfer acceptability:</b> CSU	

Advanced food production, including meat and protein fabrication. Lab work will include: stocks, sauces and soups; meat and game; poultry; fish and seafood; breakfast foods and classical cuisine. Students will be expected to meet high standards of professionalism, sanitation and work habits.

<b>R CUL 115 Dining Room Service</b>	<b>(2)</b>
<i>4 hours lecture/laboratory</i>	

**Prerequisite:** Current San Diego County Food Handler Card  
**Note:** Cross listed as CUL 115; graded only  
Orientation to dining room operations with an emphasis on dining room service, techniques of table waiting, and dining room skills. Students will be expected to meet high standards of professionalism, sanitation and work habits.

<b>R CUL 120 Patisserie and Baking I</b>	<b>(3)</b>
<i>1 hour lecture - 4 hours lecture/laboratory</i>	

**Prerequisite:** Current San Diego County Food Handler Card  
**Recommended preparation:** FCS/MICR 110  
**Note:** Cross listed as CUL 120; graded only  
Fundamentals of baking, including ingredient properties and function, and preparation and evaluation of a variety of yeast products, quick breads, cookies, cakes, pies and pastries. Students will be expected to meet high standards of professionalism, sanitation and work habits.

<b>R CUL 121 Patisserie and Baking II</b>	<b>(3)</b>
<i>1 hour lecture - 4 hours lecture/laboratory</i>	

**Prerequisite:** R CUL/CUL 120  
**Note:** Cross listed as CUL 121; graded only  
Advanced skills in the art of patisserie. Includes: classic pastries, pâte à choux and meringues; plated desserts; cake decorating; chocolate and sugar techniques. Students will be expected to meet high standards of professionalism, sanitation and work habits.

<b>R CUL 130 Pantry/Garde Manger</b>	<b>(3)</b>
<i>1 hour lecture - 4 hours lecture/laboratory</i>	

**Prerequisite:** Current San Diego County Food Handler Card  
**Recommended preparation:** R CUL/CUL 110  
**Note:** Cross listed as CUL 130; graded only

Introduction to cold food preparation and display. Includes salads, dressings, sandwiches and canapés. Students will be expected to meet high standards of professionalism, sanitation and work habits.

**R CUL 150 International Cuisine (3)**

1 hour lecture - 4 hours lecture/laboratory

**Prerequisite:** Current San Diego County Food Handler Card

**Note:** Cross listed as CUL 150; graded only

A hands-on cooking, tasting and evaluating exploration of the major cuisines of the world. Includes Asian, Latin, European and American cuisines with a focus on the cultures that influenced their development. Students will be expected to meet high standards of professionalism, sanitation and work habits.

**R CUL 200 Menu Planning and Purchasing (2)**

2 hours lecture

**Prerequisite:** R CUL/CUL 111 and FCS 165/HE 165 and R CSIS/CSIS 120

**Note:** Cross listed as CUL 200; graded only

**Transfer acceptability:** CSU

Basic principles of menu planning and purchasing with emphasis on: menu design; specifications and pricing; purchasing, inventory control and storeroom operations; and food and beverage cost control. Includes spreadsheet and database applications. Students will be expected to meet high standards of professionalism and work habits.

**R CUL 210 Foodservice Management (3)**

3 hours lecture

**Prerequisite:** R CUL/CUL 111

**Note:** Cross listed as CUL 210; graded only

Introduction to foodservice management with emphasis on human relations and employee development. Includes operational planning and coordination, problem-solving and decision-making, and personnel management. Students will be expected to meet high standards of professionalism and work habits.

**R CUL 220 Catering and Event Planning (3)**

1 hour lecture - 4 hours lecture/laboratory

**Prerequisite:** R CUL/CUL 111 and R CUL/CUL 130

**Note:** Cross listed as CUL 220; graded only

**Transfer acceptability:** CSU

Fundamentals of catering, including event planning, menu development and banquet preparation. Includes opportunities to apply culinary theory and skills in actual practice. Students will be expected to meet high standards of professionalism, sanitation and work habits.

**R CUL 230 Adv Garde Manger/Competition (3)**

1 hour lecture - 4 hours lecture/laboratory

**Prerequisite:** R CUL/CUL 111 and R CUL/CUL 130

**Note:** Cross listed as CUL 230; graded only

Application of advanced garde manger techniques in practical situations and culinary competition. Includes classical buffet presentation, decorative displays and artistic centerpieces. Students will be expected to meet high standards of professionalism, sanitation and work habits.

**R CUL 240 Wines and Affinities (1)**

1 hour lecture

**Prerequisite:** R CUL/CUL 111

**Note:** Cross listed as CUL 240; graded only

Classification and identification of wines, with emphasis on properties and affinities with food. Includes wines from various regions of the world. Students will be expected to meet high standards of professionalism and work habits.

**R CUL 298 Culinary Directed Practice I (3)**

3 hours lecture – 10 hours lab

**Prerequisite:** R CUL/CUL 111 and R CUL/CUL 130 or R CUL/CUL 121

**Note:** Cross listed as CUL 298; graded only

Directed learning opportunity for culinary arts students to increase their knowledge and skill in the areas of hot and cold food production through supervised on-the-job training. Students will be expected to follow Culinary Arts standards of professionalism. Current San Diego County Food Handler Card and TB clearance required.

**R CUL 299 Culinary Directed Practice II (3)**

3 hours lecture-10 hours lab

**Prerequisite:** R CUL/CUL 298, R CUL/CUL 200, FCS 110/MICR 110 and FCS 165/HE 165

**Note:** Cross listed as CUL 299; graded only

Directed entry-level professional work experience in the foodservice industry that provides exposure to the foodservice industry and an opportunity for culinary arts students to practice and demonstrate their employability skills and reflect on their future roles in the industry. Students will be expected to follow Culinary Arts standards of professionalism. Current San Diego County Food Handler Card and TB clearance required.

## Diesel Mechanics Technology (R DMT)

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

### PROGRAM OF STUDY

## Diesel Technology

In order to earn a certificate, students must achieve a minimum grade of 'C' in each of the certificate program courses.

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

Program Requirements		Units
AT 105	Automotive Electricity	2
AT 197	Associated Studies in Automotives	3
R DMT/DMT 50	Introduction to Diesel Mechanics	3
R DMT/DMT 55	Heavy-Duty Diesel Tune-up/ Engine Analysis	3
R DMT/DMT 61	Diesel Engine Rebuilding I	3
R DMT/DMT 62	Diesel Engine Rebuilding II	3
R DMT/DMT 65	Air Brake Systems	3
R DMT/DMT 66	Truck Transmission and Drive Lines	3
IT 100	Technical Mathematics	3
<b>Electives (Select 6 units)</b>		
AT 125	Automotive Machining	3
DMT 54	Heavy-Duty Electricity	3
DMT 56	Alternative Fuels	3
R DMT/DMT 70	Medium-Duty Diesel Engine Tune-up	3
DMT 81	Basic Hydraulics	3
DMT 96	Special Problems in Diesel Technology	.5-3
R DMT/DMT 97	Diesel Mechanics Technology Workshop	.5-3
WELD 100	Welding I	3
CE 100	Cooperative Education	1,2,3,4
<b>TOTAL UNITS</b>		<b>32</b>

Diesel Technology A.A. Degree Major or Certificate of Achievement is also offered in Diesel Mechanics Technology

### COURSE OFFERINGS

Courses taken for college credit may be applied toward a certificate or an Associate in Arts degree.

Courses numbered under 100 are not intended for transfer credit.

**R DMT 50 Introduction to Diesel Mechanics (3)***6 hours lecture/laboratory***Note:** Cross listed as DMT 50; graded only

Theory and practice of fundamental skills for the maintenance and operation of basic diesel engines. Topics for study include: basic theory of operation; engine applications; engine lubricating and cooling; intake, exhaust and fuel systems; and electronic control.

**R DMT 55 Heavy-Duty Diesel Tune Up and Engine Analysis (3)***2 hours lecture 4 hours laboratory***Prerequisite:** DMT 50/R DMT 50**Note:** Cross listed as DMT 55; graded only; may be taken 2 times

The use of software and diagnostic equipment in performing diesel tune-up. Topics include: theory of operation, tune-up procedures, fuel system function and repair; diagnostic equipment usage, electronic engine controls, mechanical and electronic engine system troubleshooting.

**R DMT 61 Diesel Engine Rebuilding I (3)***6 hours lecture/laboratory***Recommended preparation:** R DMT/DMT 50**Note:** Cross listed as DMT 61; graded only; may be taken 2 times

Theory and practice in rebuilding diesel engines. Topics for study include disassembly, cleaning, inspection, and analysis of engine parts. Also included are cylinder head service, sleeve and piston service, advanced machining and measuring techniques.

**R DMT 62 Diesel Engine Rebuilding II (3)***6 hours lecture/laboratory***Prerequisite:** R DMT/DMT 61**Note:** Cross listed as DMT 62; graded only

Theory and practice in rebuilding diesel engines. Topics for study include final cleaning, inspection and reassembly of engine parts. Also included are assembly measuring, torque procedures and torque-turn methods used on engine assembly, and engine testing upon completion of assembly.

**R DMT 65 Air Brake Systems (3)***2 hours lecture 3 hours laboratory***Note:** Cross listed as DMT 65; graded only

The service and repair of heavy duty hydraulic and air brake systems and their components. Topics of study include brake troubleshooting, complete system repair, anti skid brake system, and related axle services.

**R DMT 66 Truck Transmission and Drive Line (3)***2 hours lecture 3 hours laboratory***Note:** Cross listed as DMT 66; graded only

Service and repair of heavy duty truck drive lines. Topics for study include the disassembly, inspection, and reassembly of single and multiple disc clutches, four to fifteen speed transmissions, universal joints, and differentials.

**R DMT 70 Medium Duty Diesel Engine Tune Up (3)***2 hours lecture 4 hours laboratory***Note:** Cross listed as DMT 70; graded only; may be taken 2 times

The use of diesel tune up and diagnostic equipment. Topics include: fuel systems; compression testing; fuel pump and injection timing; troubleshooting procedures; alternators, regulators, and starting systems.

**R DMT 97 Diesel Mechanics Technology Workshop (.5-3)**

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

**Note:** Cross listed as DMT 97; graded only; may be taken 4 times

A special selection of topics specific in nature. The contents will vary depending on specific needs of the students and community.

**Drafting Technology (R DT)**

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

**COURSE OFFERINGS**

Courses taken for college credit may be applied toward a certificate or an Associate in Arts degree.

Courses numbered under 100 are not intended for transfer credit.

**R DT 125 AutoCAD Introduction to Computer Aided Drafting (3)***6 hours lecture/laboratory***Note:** Cross listed as DT 125; may be taken 2 times; maximum of 4 completions in any combination of DT/R DT 125, DT/R DT 126, DT/R DT 127**Transfer acceptability:** CSU; UC – R DT 125 and 126 combined: maximum credit, one course

An introduction to computer aided drafting using AutoCAD software and IBM compatible computers. Hands on experience with AutoCAD to include the following operations: preparing and editing drawings, storage and retrieval of drawings, and production of commercial quality drawings on a plotter. Introductory computer terminology and techniques in Windows.

**R DT 126 AutoCAD Intermediate Computer Aided Drafting (3)***6 hours lecture/laboratory***Prerequisite:** DT/R DT 125**Note:** Cross listed as DT 126; may be taken 2 times; maximum of 4 completions in any combination of DT/R DT 125, DT/R DT 126, DT/R DT 127**Transfer acceptability:** CSU; UC – R DT 125 and 126 combined: maximum credit, one course

Advanced theory and hands on operation of a CAD system. Emphasis is placed on large scale drawings, three dimensional software techniques, orthographic projections, and complex computer aided manufacturing applications.

**R DT 127 AutoCAD Customization (3)***6 hours lecture/laboratory***Prerequisite:** R DT/DT 126**Note:** Cross listed as DT 127; may be taken 2 times; maximum of 4 completions in any combination of DT/R DT 125, DT/R DT 126, DT/R DT 127**Transfer acceptability:** CSU

Advanced theory and hands on operation of a CAD system. Emphasis is placed on increased productivity, using customization and portfolio presentation for successful career opportunities.

**R DT 128 SolidWorks Introduction to 3D Design and Presentation (3)***6 hours lecture/laboratory***Prerequisite:** DT 110**Note:** Cross listed as DT 128; may be taken 2 times**Transfer acceptability:** CSU

Advanced theory and hands on operation of three-dimensional software techniques. Emphasis is placed on wireframe, surface, solid, and parametric three-dimensional modeling.

**R DT 130 CAD/CAM Machining (3)***6 hours lecture/laboratory***Prerequisite:** DT 110 and DT/R DT 128**Note:** Cross listed as DT 130; graded only; may be taken 2 times

Hands-on operation of importing three-dimensional solid and parametric three-dimensional models into CAD/CAM operations.



**R DT 131 SolidWorks Advanced  
3D Design and Presentation (3)***6 hours lecture/laboratory***Prerequisite:** DT/R DT 128**Note:** Cross listed as DT 131; may be taken 2 times**Transfer acceptability:** CSU

Advanced theory and hands-on operation of solid and parametric three-dimensional models. Emphasis is placed on creating molds, advanced sheet metal design and developing dynamic assemblies.

**R DT 200 Advanced Computer Aided  
Architectural Drafting (4)***8 hours lecture/laboratory***Prerequisite:** DT/R DT 125 and completion of, or concurrent enrollment in, DT 105**Note:** Cross listed as DT 200; graded only; may be taken 2 times**Transfer acceptability:** CSU

Advanced techniques in the operation of AutoCAD software for architectural applications on IBM-compatible computers. Preparation of various architectural working drawings from a preliminary residential design.

**R DT 202 Advanced Computer Aided  
Architectural Drafting II (4)***8 hours lecture/laboratory***Recommended preparation:** DT/R DT 200**Note:** Cross listed as DT 202; graded only; may be taken 2 times**Transfer acceptability:** CSU

Third-party architectural software for use in conjunction with AutoCAD software. Preparation of 3D architectural models and their manipulation for preparation of individual architectural working drawings including: dimensioned floor plans, building sections, elevations, etc.

**R GC 170 Screen Printing (3)***6 hours lecture/laboratory***Note:** Cross listed as GC 170; graded only; may be taken 4 times**Transfer acceptability:** CSU

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

**R GC 172 Textile Screen Printing (3)***6 hours lecture/laboratory***Note:** Cross listed as GC 172; graded only; may be taken 3 times**Transfer acceptability:** CSU

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

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

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

**Note:** Cross listed as GC 197A; graded only; may be taken 3 times**Transfer acceptability:** CSU

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

**R GC 200 Introduction to Multimedia (3)***6 hours lecture/laboratory***Note:** Cross listed as GC 200; graded only; may be taken 4 times**Transfer acceptability:** CSU

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

**R GC 202 Web Page Layout I (3)***6 hours lecture/laboratory***Note:** Cross listed as GC 202; graded only; may be taken 4 times**Transfer acceptability:** CSU

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

**R GC 203 Interactive Publishing with PDF's (3)***6 hours lecture/laboratory***Note:** Cross listed as GC 203; graded only; may be taken 4 times**Transfer acceptability:** CSU

This hands-on course looks at a comprehensive range of print, Web, and multimedia features in Adobe Acrobat for creating and distributing electronic documents reliably and securely. Topics and projects include e-books, forms, editing, prepress, accessibility, capture, and a variety of methods to convert and repurpose documents.

**R GC 248 Acrobat for Print (3)***6 hours lecture/laboratory***Note:** Cross listed as GC 248; May be taken 4 times**Transfer acceptability:** CSU

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

**R GC 249 Page Layout and Design II (3)***6 hours lecture/laboratory***Note:** Cross listed as GC 249; may be taken 4 times

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

**R GC 260 Portfolio Development and Presentation (3)***6 hours lecture/laboratory***Prerequisite:** R GC/GC 140 and R GC/GC 152

## Graphic Communications (R GC)

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

### COURSE OFFERINGS

Courses taken for college credit may be applied toward a certificate or an Associate in Arts degree.

**R GC 140 Digital Imaging/Photoshop I (3)***6 hours lecture/laboratory***Note:** Cross listed as GC 140; graded only; may be taken 4 times**Transfer acceptability:** CSU

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

**R GC 149 Page Layout and Design I (3)***6 hours lecture/laboratory***Note:** Cross listed as GC 149; may be taken 4 times

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

**R GC 152 Desktop Publishing with Illustrator (3)***6 hours lecture/laboratory***Note:** Cross listed as GC 152; graded only; may be taken 4 times**Transfer acceptability:** CSU

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

**Note:** Cross listed as GC 260; graded only; may be taken 2 times  
 Students will develop a personal portfolio to showcase their graphic skills and techniques. Various resources, including the Internet, will be used to conduct a job search, develop a resume and learn interviewing techniques. Guest speakers will share industry tips. Students will practice presentation and interviewing skills, with feedback from professionals working in graphics and related industries.

## Optical Technology (R OT)

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

### PROGRAM OF STUDY

#### Optical Technology

Prepares students for entry-level positions as optical dispensing technicians, optical lab technicians, optometric assistants, ophthalmic assistants, and other occupations in the vision care field.

In order to earn a certificate, students must achieve a minimum grade of 'C' in each of the certificate program courses.

### CERTIFICATE OF PROFICIENCY

Required Courses	Units
R OT 50      Optical Technology I	8
R OT 55      Optical Technology II	8
<b>TOTAL UNITS</b>	<b>16</b>

Recommended Electives: R OT 60, 97

### COURSE OFFERINGS

Courses taken for college credit may be applied toward a certificate or an Associate in Arts degree.

Courses numbered under 100 are not intended for transfer credit.

#### R OT 50      Optical Technology I      (8)

6 hours lecture 6 hours laboratory

**Note:** Graded only

Basic theory of light and optics; anatomy and function of the eye; spectacle frame and lens design and fabrication; tools of the trade; and dispensing skills for optical technicians.

#### R OT 55      Optical Technology II      (8)

6 hours lecture 6 hours laboratory

**Prerequisite:** R OT 50

**Note:** Graded only

In-depth study of anatomy and function of the eye. Advanced theories of light, lenses, mirrors, and optics. Specialized dispensing skills. Topic preparation for the American Board of Opticianry (ABO) certification exams.

#### R OT 70      Ophthalmic Medical Assisting I      (2)

4 hours lecture/laboratory

**Prerequisite:** R OT 50

**Note:** Graded only

Introduction to assisting in the ophthalmic medical environment. Topics include ophthalmic exam, ophthalmic drugs, structure, function and common diseases of the eye and related tissues, optics and refraction, ocular motility and visual fields. Course content aligns with national certification standards for Certified Ophthalmic Assistant (COA) as set forth by the Joint Commission on Allied Health Personnel in Ophthalmology (JCAHPO).

#### R OT 75      Ophthalmic Medical Assisting II      (2)

4 hours lecture/laboratory

**Prerequisite:** R OT 70

**Note:** Graded only

Intermediate-level training in the ophthalmic health field. Includes keratometry, topography, refractometry, retinoscopy, slit lamp examination, tonometry, visual field testing, ultra-sound A-Scan measurements, intraocular implant calculations and ultra-sound B-Scan examination. Course content aligns with national certification standards for Certified Ophthalmic Technician (COT) as set forth by the Joint Commission on Allied Health Personnel in Ophthalmology (JCAHPO)

#### R OT 97      Optical Technology Topics      (.5-4)

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

**Note:** Graded only; may be taken 4 times

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

## Upholstery (R UP)

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

### PROGRAM OF STUDY

#### Automotive Upholstery

Prepares students for employment in a variety of specialized areas of upholstery including automobiles, trucks, recreational vehicles and watercraft. Students will master skills and techniques specific to each area of interest.

In order to earn a certificate, students must achieve a minimum grade of 'C' in each of the certificate program courses.

### CERTIFICATE OF PROFICIENCY

Program Requirements	Units
R UP 85      Basic Upholstery	4
R UP/R.AT 90      Automotive Upholstery	4
<b>TOTAL UNITS</b>	<b>8</b>

#### Upholstery

Prepares students for variety of positions in upholstery and related industries. Students will master skills and techniques required for furniture upholstery and accessories, antique restoration, custom draperies and window treatments.

In order to earn a certificate, students must achieve a minimum grade of 'C' in each of the certificate program courses.

### CERTIFICATE OF PROFICIENCY

Program Requirements	Units
R UP 85      Basic Upholstery	4
R UP 86      Advanced Upholstery	4
R UP 95      Window Treatments	1.5
R UP 96      Decorator Accessories	1.5
<b>TOTAL UNITS</b>	<b>11</b>

### COURSE OFFERINGS

Courses taken for college credit may be applied toward a certificate or an Associate in Arts degree.

Courses numbered under 100 are not intended for transfer credit.

**R UP 75 Introduction to Upholstery (2)**

4 hours lecture/laboratory

**Note:** Graded only

Introduction to upholstery skills and techniques. Includes fabric selection, measurement, layout and other considerations. Students will complete an individual project (chair) using commercial sewing machines, cushion stuffer, pneumatic and hand tools. Cost estimating and other functions essential to a successful business venture will be discussed.

**R UP 85 Basic Upholstery (4)**

8 hours lecture/laboratory

**Note:** Graded only; may be taken 2 times

Upholstering or replacing existing upholstery for various types of furniture. Commercial sewing machines, cushion stuffer, pneumatic tools, and hand tools will be used to complete individual projects.

**R UP 86 Advanced Upholstery (4)**

8 hours lecture/laboratory

**Recommended preparation:** R UP 85

**Note:** Graded only; may be taken 2 times

Advanced upholstery principles and techniques. Power sewing equipment, pneumatic tools, and specialized hand tools will be used to complete complex upholstery projects. Includes estimating, customer relations, tax laws, and other fundamentals of upholstery business operation.

**R UP 90 Automotive Upholstery (4)**

8 hours lecture/laboratory

**Note:** Cross listed as R AT 90; graded only; may be taken 2 times

Skills and techniques required to replace, repair or customize automotive and related upholstery. Fabrication of interiors and accessories for automobile interiors, watercraft and other recreational vehicles. Techniques and considerations related to auto alarm or sound system installation. Students will complete individual or group projects.

**R UP 95 Window Treatments (1.5)**

3 hours lecture/laboratory

**Note:** Graded only

Design and fabrication of various window treatments. Includes industry standards, design and fabric options, measuring and estimating, and related business concepts. Students will complete sample projects.

**R UP 96 Decorator Accessories (1.5)**

3 hours lecture/laboratory

**Note:** Graded only

Skills and techniques necessary for creation of a variety of decorator accessories: upholstered headboards; designer cushions; custom pillows; lampshades; duvet covers, bedspreads and dust ruffles; table runners and covers; and simple slip-covers. Includes design and fabric/materials selection, industry standards, cost estimating/pricing and other business considerations. Students will complete individual projects.

**R UP 97 Upholstery Topics (.5-4)**

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

**Note:** Graded only; may be taken 4 times

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

## Noncredit Courses

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 remedial, developmental, occupational and other general educational opportunities as may be deemed necessary to provide for the civic and liberal

education of the citizens of the community. All classes are taught by qualified instructors. The program is offered by Occupational & Noncredit Programs within the Division of Career, Technical, and Extended Education Division.

The State has defined the following nine specific categories for funding: programs for the older adult, English as a second language, citizenship for immigrants, programs for substantially handicapped persons, parenting classes, remedial academic courses for elementary or secondary basic skills, short term vocational programs, educational programs for home economics, and courses for health and safety education.

To make the classes and programs more accessible, classes are offered throughout the district in community and senior centers, museums, parks, libraries, banks, churches, convalescent hospitals, as well as at the San Marcos campus, the Escondido Center, and seven Palomar College education sites.

The classes may vary in length from four weeks to seventeen weeks. Although some classes are tailored for a specific student constituency, all classes are open to the public. No enrollment fees are charged for the noncredit classes. Students who take noncredit classes on the San Marcos campus or at the Escondido Center will be required to pay health fees and parking fees.

Contact the Occupational & Noncredit Programs at (760) 744-1150, ext. 2155 or 2284 for further information and registration procedures.

## Adult Basic Education (N ABED)

### N ABED 201 Literacy/Adult Basic Education

48 to 192 hours lecture/laboratory

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 classrooms activities, independent activities, collaborative learning, and mediated learning.

## Older Adult Education (N ADLT)

### N ADLT 700 Be Alive—Exercise

16 hours lecture/laboratory

A low impact aerobic exercise program designed specifically for the adult student. Exercises incorporate gentle but effective movements to increase endurance, flexibility, agility, strength, and muscle tone. Stretch bands and weights may be incorporated into the course. The course may be adapted for individuals with physical challenges.

### N ADLT 701 Current and Newsworthy

16 hours lecture

A multi-media approach to the discussion of current local, national, and international events that will provide a frame of reference for exploration of historical and personal events. Guest speakers may be invited to address the group on specific topics. The class may be modified for skilled and day care residents. Course may be adapted for skilled and day care residents.

### N ADLT 702 Drawing, Beginning (Portrait)

24 hours lecture/laboratory

Key elements necessary to draw the human figure and face with pencil, colored pencil, pen and ink, conte, charcoal, pastels, and mixed media.

### N ADLT 703 Experimental Arts/Mixed Media

24 hours lecture/laboratory

Design and execution of works of art that incorporate a variety of media including but not limited to watercolor, oils, acrylics, colored pencils, pen and ink, pastels, wood, metal, fibers, and found objects.

**NADLT 704 Exploring North County***32 hours lecture*

To explore and appreciate the unique character of San Diego through its history, people and cultures with an emphasis on the individual's opportunity to be a vital participant in the community.

**NADLT 705 Folk Medicine/Herbology***16 hours lecture/laboratory*

An exploration of the historical use of herbology and folk medicine and its incorporation by modern western practitioners into an holistic approach to health care and disease prevention.

**NADLT 706 Hatha Yoga***16 hours lecture/laboratory*

This course will allow the individual to progress from beginner to advanced status. Yoga integrates static and dynamic physical postures with mental discipline to achieve greater well-being. Students will increase strength, flexibility, and balance; decrease mental and physical stress; and improve circulation throughout the body.

**NADLT 707 Portrait Painting***24 hours lecture/laboratory*

The fundamentals of painting the human figure and face using oil based media, acrylics, watercolor, and/or mixed media.

**NADLT 708 Quilting***24 hours lecture/laboratory*

This course presents the design and execution of various techniques to produce a quilt. A variety of quilt designs will be presented.

**NADLT 709 So You Want to Write***24 hours lecture/laboratory*

This course gives a practical approach to becoming a writer. The course will employ the read/critique format combined with lecture and guest speakers. Written self expression will be enhanced through exploration and appraisal of a variety of genre, elements of style, and introduction to the basic concepts of writing fiction and nonfiction. Students will gain practical knowledge regarding: selecting an agent; "pitching" a script idea; evaluating the options of self-publication and/or online publication; and submitting letters of inquiry, proposals and manuscripts to a variety of media.

**NADLT 710 Stitchery***24 hours lecture/laboratory*

This course will introduce the design and production of a variety of handicrafts, folk arts, and needle arts. Attention will focus on integrating various materials, patterns, and techniques into creating unique artifacts.

**NADLT 711 Watercolor***24 hours lecture/laboratory*

Instruction in basic to advanced techniques of transparent watercolor as a unique art form.

**NADLT 712 Drawing with Colored Pencils***24 hours lecture/laboratory*

A variety of methods for using dry and wet colored pencils will be explored. Students will also learn how to use these materials with other materials such as graphite and ink. Students will learn to select the appropriate paper and pencils to achieve the desired effect of their work.

**NADLT 713 Tai Chi***48 hours lecture/laboratory*

Heart Coherent Tai Chi Kung provides practical training, with scientific and philosophical rationale and evidence, by which participants may improve and maintain holistic wellness. The practice of Heart Coherent Tai Chi Kung moving meditation and exercise offers a path to stress management, improved strength, flexibility, balance and harmony of body and mind. This is an on-going course for learning and deepening into the practice, continuing from semester to semester.

**NADLT 714 Glazing Techniques***24 hours laboratory*

This course will cover methods glazing using acrylic glazing mediums.

**NADLT 715 Mixed Media Drawing***48 hours lecture/laboratory*

This course will cover the interaction of both wet and dry media in an experiential approach.

**NADLT 716 PACE-People with Arthritis Can Exercise***16 hours laboratory*

PACE is a community-based, non-clinical program that involves group participation. Includes activities designed to improve certain physical parameters such as endurance and joint motion primarily for individuals with arthritis.

**NADLT 717 Creative Retirement***16 hours lecture*

A multi-dimensional course designed to enhance the well-being of the older adult through the exploration and appreciation of diverse cultures and peoples. A variety of media may be incorporated throughout the course. Employing the art, music, literature, language, travel videotapes and/or the cuisine of the chosen subject will give the student a unique opportunity to experience and appreciate different countries and ethnic cultures. Each module may differ in its focus and the medium of presentation. The course may be modified for residents of skilled and day care facilities as appropriate.

**NADLT 718 Introduction to Ceramics***96 hours lecture/laboratory*

An introduction to basic forming techniques of clay including hand building, throwing and firing techniques.

**Basic Education (N BASC)****N BASC 200 Literacy/Adult Basic Education***30 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 201 Math Placement Test Preparation***8 hours lecture*

Review concepts and problem solving techniques from beginning algebra, with emphasis on basic operations with signed number polynomials and linear functions. Topics include problem-solving techniques, algebraic expressions, polynomials, linear equations, integer exponents, proportions, and radicals. Course is intended for students who have passed an introductory algebra class.

**N BASC 202 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 203 Basic Mechanical Skills***48 hours laboratory*

To provide basic skills and knowledge needed for success in an educational or shop setting. Emphasis will be on safety and tool identification and usage.

**N BASC 204 Basic Sewing Skills***48 hours lecture/laboratory*

The basic skills necessary for quality construction of apparel items will be presented, demonstrated, and applied.

**N BASC 205 Preparation for Child Development Careers***42 to 48 hours lecture*

This course is designed to prepare ESL students to enter the Child Development

major. An introduction to the field of Child Development for English as a Second Language students. The course will begin in Spanish and the transition to English will begin within the first half of the class. Reading and writing skills in human development from conception through adolescence. Basic understanding of theories and background of Child Development.

## Career and Technical Education (N CTED)

### N CTED 600 Basic Blueprint Reading

32 hours lecture/laboratory

This course will cover the fundamental functions and structure of blueprints. Course content will include construction drawings, line symbols, freehand sketching and pictorial drawings.

### N CTED 601 P.C. 832 Arrest and Control

40 hours lecture

A POST-approved arrest and control course covering professional orientation, law, laws of evidence, investigation, community relations, communications (report writing), and arrest and control. Excludes firearms course. Meets POST requirements for the P.C. 832 40-hour course. Required for those peace officers who make arrests.

### N CTED 605 Basic Tutoring Training

32 hours lecture/laboratory

This course will teach college students to tutor other college students through lectures, discussions, video tapes, and practical experience.

### N CTED 608 Storm Water Regulations and Management

36 hours lecture

An in-depth study of the impact and control of water pollution from urban runoff and other human activities and the evolving role of comprehensive storm water management. Includes an examination of the permitting and monitoring requirements for construction, industrial, commercial, and residential activities with particular emphasis on Best Management Practices (BMP). The management of urban runoff is examined from the facility, community and watershed perspectives. Also discussed are the roles of education and enforcement in the successful management of urban runoff pollution. Intended for managers of industrial and commercial facilities, landscape managers, developers and construction companies, municipalities, and others regulated under federal and state water pollution laws.

## Citizenship (N CTZN)

### N CTZN 400 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 an Immigration and Naturalization Service official.

## Customer Service Academy (CSA)

### Customer Service Academy

The Customer Service Academy is a 10-module 60-hour course of instruction. Following are the 10 modules, each have six hours of instruction on the listed topics.

Non-credit courses required for a Certificate of Completion.

- 40 Customer Service
- 41 Communication
- 42 Team Building
- 43 Time Management
- 44 Stress Management
- 45 Conflict Management
- 46 Workplace Attitudes
- 47 Managing Organizational Change
- 48 Decision Making and Problem Solving
- 49 Ethics and Values

### CSA 40 Customer Service

6 hours lecture

**Note:** May be taken 4 times

Designed to provide students with key skills and attitudes needed to effectively meet the needs of customers. Students will be introduced to the concept of internal and external customers, customer satisfaction, and customer retention. Topics will also include communicating with customers, developing a positive attitude, handling complaints, and sales skills.

### CSA 41 Communication

6 hours lecture

**Note:** May be taken 4 times

Designed to introduce students to key elements of communication within business organizations. Topics will include verbal and nonverbal communication, listening skills, and specific supervisory communication skills.

### CSA 42 Team Building

6 hours lecture

**Note:** May be taken 4 times

Designed to provide the student with an understanding of how teams work together, common problems teams encounter and how to solve them. Students will learn to recognize various team-player styles. Students will be introduced to team building in the workplace.

### CSA 43 Time Management

6 hours lecture

**Note:** May be taken 4 times

Designed to introduce students to time management principles and specific tools to assist in making maximum use of time. Basic concepts of organizing for maximum time management will also be covered.

### CSA 44 Stress Management

6 hours lecture

**Note:** May be taken 4 times

Designed to acquaint students with the skills that a supervisor needs to assist employees in managing stress. Topics included are stress recognition, recognizing job burnout, and some commonly used methods of assisting employees with these issues.

### CSA 45 Conflict Management

6 hours lecture

**Note:** May be taken 4 times

Designed to provide students with an analysis of attitudes and behaviors which create conflict between individuals and groups within an organization. Topics include identifying and managing conflict, strategies for resolving conflicts, and tips for mediating workplace conflict.

### CSA 46 Workplace Attitudes

6 hours lecture

**Note:** May be taken 4 times

Designed to provide students with key skills to effectively maintain a positive attitude in the workplace and at home. Students will be introduced to the concepts of how attitudes are communicated, the three types of attitudes, and how to adjust one's attitude. Topics will also include the primary causes of a bad attitude, turnaround strategies to battle bad attitudes, and specific techniques to raise the attitudes of others.

**CSA 47 Managing Organizational Change***6 hours lecture***Note:** May be taken 4 times

Designed to provide students with an understanding of change and the influence it has on an organization and the individuals in an organization. Topics will include understanding organizational change, theoretical models of change, stages of change, and how to manage organizational change.

**CSA 48 Decision Making and Problem Solving***6 hours lecture***Note:** May be taken 4 times

Designed to introduce students to decision making and problem solving as a supervisor.

**CSA 49 Ethics and Values***6 hours lecture***Note:** May be taken 4 times

Designed to acquaint students with the importance of values and ethics in the workplace. Emphasis will be placed on how values influence actions, how to develop a personal ethical philosophy, and how to assist others in developing positive ethics and values.

**Disability Education (N DSAB)****N DSAB 500 Music and Movement***24 hours laboratory*

This course facilitates the stimulation and integration of visual, tactile, and auditory senses through the use of music and physical movement, targeting receptive and expressive language skills, as well as gross and fine motor skills.

**N DSAB 501 Independent Living Skills***72 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.

**English as a Second Language (N ESL)**

Contact the English as a Second Language Department for further information, (760) 744-1150, ext. 2261.

**N ESL 300 Basic ESL***48 to 192 hours lecture/laboratory*

Basic literacy and conversation development for non-native speakers of English.

**N ESL 301 Beginning ESL I***48 to 192 hours lecture/laboratory*

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

**N ESL 302 Beginning ESL II***48 to 192 hours lecture/laboratory*

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

**N ESL 303 Beginning ESL III***48 to 192 hours lecture/laboratory*

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

**N ESL 304 Intermediate ESL I***48 to 192 hours lecture/laboratory*

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

**N ESL 305 Intermediate ESL II***48 to 192 hours lecture/laboratory*

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

**N ESL 306 Intermediate ESL III***48 to 192 hours lecture/laboratory*

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

**Home Economics Education (N HMEC)**

There are no courses in Home Economics Education at this time.

**Health and Safety Education (N HSED)****N HSED 900 Rape Aggression Defense***12 hours lecture*

The Rape Aggression Defense (R.A.D.) course provides realistic self-defense tactics and techniques for women. The R.A.D. system is a comprehensive, women-only course that begins with awareness, prevention, risk reduction and risk avoidance, and progresses to the basics of hands-on defense training.

**N HSED 901 Certified Emergency Response Team***20 to 24 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.

**N HSED 902 Senior Volunteer Patrol Academy***52 hours lecture*

Designed to prepare senior citizens to join the San Diego Sheriff's Department's Senior Volunteer Patrol Program. Senior volunteers perform a wide variety of duties and provide essential community services. Instruction will be provided in the use of police radios, operation of patrol vehicles, routine patrol duties, patrol safety, fingerprinting, and CPR. The student will participate in several ride-alongs and scenario training exercises.

**Parenting (N PRNT)****N PRNT 100 Solve Problems with Your Children***24 hours lecture*

Provide parents with the necessary elements that will allow them a better understanding of parent-child interaction; to include tools for applying the concepts, principles and methods to the solutions of family problems.

**N PRNT 101 Helping Your Child with Math***20 hours lecture/laboratory*

This course will provide parents of 3rd through 5th grade students an understanding of the mathematical concepts, terminology, and procedures used in their child's school and provide tools for helping their child with math homework.