

ARTI 246 Digital 3D Design and Modeling (3)
 1½ hours lecture - 4½ hours laboratory
Recommended preparation: ARTD 150
Transfer acceptability: CSU
 Fundamentals of computerized 3-D modeling and Design. Hands on experience with modeling, lighting, developing texture maps and rendering.

ARTI 247 Digital 3D Design and Animation (3)
 1½ hours lecture - 4½ hours laboratory
Recommended preparation: ARTD 220
Transfer acceptability: CSU
 Concepts and techniques of 3-dimensional animation using Maya software. The course will provide an understanding of the production, animation and postproduction process.

ARTI 248 Digital 3D Design and Sculpture (3)
 1½ hours lecture - 4½ hours laboratory
Transfer acceptability: CSU
 Concepts and techniques of digital sculpting using ZBrush software. The course will provide an understanding of high detail polygon modeling and the use of mapping techniques to transfer detail to low polygon models.

Astronomy (ASTR)

Contact the Earth, Space, and Aviation Sciences Department for further information.
 (760) 744-1150, ext. 2512
 Office: NS-110G
 For transfer information, consult a Palomar College Counselor.

Associate in Science Degrees -

AS Degree requirements are listed in Section 6 (green pages).
 • Astronomy

Certificates of Achievement -

Certificate of Achievement requirements are listed in Section 6 (green pages).
 • Astronomy

Planetarium

The Planetarium is part of the Earth, Space, and Aviation Sciences Department at Palomar College. Several types of planetarium programs are offered for the community including school programs for area elementary and secondary schools. The planetarium also offers evening shows throughout each month, open to students of Palomar College and the general public. For further information, visit www.palomar.edu/planetarium or contact the planetarium at planetarium@palomar.edu or (760) 744-1150, ext. 2833.

PROGRAM OF STUDY

Astronomy

Provides the student with sufficient background to begin upper division course work. Transfer students should consult the four year college or university catalog for specific requirements or see a Palomar College counselor. Students pursuing a major in Astronomy at San Diego State University must complete a minor in Mathematics.

A.S. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT

Program Requirements		Units
ASTR 100	Principles of Astronomy	3
ASTR 105L	Introduction to Astronomy Laboratory	1
ASTR/GEOL 120	Planets, Moons and Comets	3
MATH 140	Calculus/Analytic Geometry, First Course	5
MATH 141	Calculus/Analytic Geometry, Second Course	4
MATH 205	Calculus/Analytic Geometry, Third Course	4

PHYS 230	Principles of Physics	5
PHYS 231	Principles of Physics	5
PHYS 232	Principles of Physics	4

TOTAL UNITS 34

Recommended Electives: ASTR 210, 295

COURSE OFFERINGS

ASTR 100 Principles of Astronomy (3)

3 hours lecture

Transfer acceptability: CSU; UC

An introduction to the science of astronomy and the nature of the universe. Topics include observation and movements of celestial bodies, exploration of celestial phenomena, the physics of light, and the nature of stars and galaxies.

ASTR 105L Introduction to Astronomy Laboratory (1)

3 hours laboratory

Prerequisite: A minimum grade of 'C' in ASTR 100 or 120, or concurrent enrollment in ASTR 100 or 120

Transfer acceptability: CSU; UC

Exploration of the techniques used in astronomy to determine the physical properties of stars and galaxies. The physical nature of light and the optical principles of a telescope are also explored. Measurements of planetary and stellar phenomena are used to investigate the astronomical methods of determining the size, composition and age of the universe.

ASTR 120 Planets, Moons, and Comets (3)

3 hours lecture

Note: Cross listed as GEOL 120

Transfer acceptability: CSU; UC

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

ASTR 197 The Universe: Contemporary Topics in the Space Sciences (1-3)

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

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

Selected topics in astronomy and space sciences, emphasizing current research and discoveries. Refer to the Class Schedule for specific topics covered.

ASTR 210 Life in the Universe (3)

3 hours lecture

Prerequisite: A minimum grade of 'C' in ASTR 100 or 120

Transfer acceptability: CSU

A scientific exploration of life in the universe using the findings of astronomy biology, and chemistry. Topics include the development of life and its environments on Earth, the search for life in the cosmos, interstellar communications and travel, and the effects of contact.

ASTR 295 Directed Study in Astronomy (1, 2, 3)

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

Prerequisite: A minimum grade of 'C' in ASTR 100 or 120

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

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

Athletics and Competitive Sports (ACS)

Contact the Athletics Department for further information.
(760) 744-1150, Ext. 2460
Office: O-10

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

Prospects for Palomar College intercollegiate athletic teams may not participate in an official practice or competition, nor be issued equipment or apparel from athletic equipment management without departmental verification of the following items:

1. Current and active full-time enrollment in good standing at Palomar College. (Full-time enrollment defined as enrollment in a minimum of 12 semester units, nine (9) of which must be in academic course work leading to a certificated degree and/or transfer to the four-year level.
2. Qualification of CCCAA athletic and academic eligibility standards.
3. Satisfactory physical examination by a physician (medical doctor) approved by Palomar College.
4. Health insurance evaluation by the Palomar College Athletic Training Staff.
5. Participate in the Palomar College Athletic Academic Advisement Program which includes:
 - a. Establishment of an Individual Education Plan by October 15th for Fall-sport athletes and by March 15th for Spring-sport athletes.
 - b. Assessment of academic course progress conducted each semester.

INTERCOLLEGIATE ATHLETIC COURSE OFFERINGS

Students enrolled in an Athletic and Competitive Sport are limited to 175 contact hours per year in Kinesiology courses that focus on conditioning or skill development for that respective sport. Specific information about enrollment limitations for Kinesiology classes is available at <http://www.palomar.edu/schedule/restrictions.htm>

Courses numbered under 100 are not intended for transfer credit.

ACS 50 Introduction to Collegiate Athletics (1)

1 hour lecture

Program for matriculation, eligibility rules, exploring and identifying major emphasis of study, academic success skills, educational planning as it relates to transfer as a student athlete.

ACS 55 Cheerleading (1, 2)

3 or 6 hours laboratory

Prerequisite: Enrollment subject to audition

Note: This is a TBA class and will require travel away from the college on weekends and other dates

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

ACS 101 Intercollegiate Softball (2)

175 instructional hours.

Transfer acceptability: CSU; UC - max credit combined with KINE activity courses, 4 units

Provides women with the opportunity to develop advanced skills and strategies in intercollegiate softball which will be applied to competitive situations.

ACS 110 Intercollegiate Basketball (2)

175 instructional hours.

Transfer acceptability: CSU; UC - max credit combined with KINE activity courses, 4 units

Provides men and women with the opportunity to develop advanced skills and strategies in intercollegiate basketball which will be applied to competitive situations.

ACS 115 Intercollegiate Golf (2)

175 instructional hours.

Transfer acceptability: CSU; UC - max credit combined with KINE activity courses, 4 units

Provides students with the opportunity to develop advanced skills and strategies in intercollegiate golf which will be applied to competitive situations.

ACS 120 Intercollegiate Tennis (2)

175 instructional hours.

Transfer acceptability: CSU; UC - max credit combined with KINE activity courses, 4 units

Provides men and women with the opportunity to develop advanced skills and strategies in intercollegiate tennis which will be applied to competitive situations.

ACS 125 Intercollegiate Soccer (2)

175 instructional hours.

Transfer acceptability: CSU; UC - max credit combined with KINE activity courses, 4 units

Provides men and women with the opportunity to develop advanced skills and strategies in intercollegiate soccer which will be applied to competitive situations.

ACS 130 Intercollegiate Volleyball (2)

175 instructional hours.

Transfer acceptability: CSU; UC - max credit combined with KINE activity courses, 4 units

Provides men and women with the opportunity to develop advanced skills and strategies in intercollegiate volleyball which will be applied to competitive situations.

ACS 135 Intercollegiate Swimming and Diving (2)

175 instructional hours.

Transfer acceptability: CSU; UC - max credit combined with KINE activity courses, 4 units

This course provides men and women with the opportunity to develop advanced skills and the strategies in intercollegiate swim/diving which will be applied to competitive situations.

ACS 140 Intercollegiate Water Polo (2)

175 instructional hours.

Transfer acceptability: CSU; UC - max credit combined with KINE activity courses, 4 units

Provides men and women with the opportunity to develop advanced skills and strategies in intercollegiate water polo which will be applied to competitive situations.

ACS 145 Intercollegiate Football (2)

175 instructional hours.

Transfer acceptability: CSU; UC - max credit combined with KINE activity courses, 4 units

Provides students with the opportunity to develop advanced skills and strategies in intercollegiate football which will be applied to competitive situations.