ART 295   Directed Study in Art   (1, 2, 3)
3, 6, or 9 hours laboratory
Prerequisite: *A minimum grade of 'C' in 18 units of college-level art including ART 102, 104 or 105, 165, and 166, and instructor's approval of proposed project or research*
Transfer acceptability: *CSU; UC - Credit determined by UC upon review of course syllabus.*
Independent study for advanced students dealing with projects or research in areas not covered by regular classes. Students will work under the guidance of an instructor.

ART 296   Special Projects   (1, 2, 3)
2, 4, or 6 hours laboratory
Prerequisite: *A minimum grade of 'B' in 6 units of college-level course work in a specialized area of art, and instructor's approval of the proposed project*
Transfer acceptability: *CSU; UC– Credit determined by UC upon review of course syllabus.*
A course for the student who has demonstrated a proficiency in art and wishes to work beyond existing classes or desires to pursue a project which does not fit into the context of existing classes. Students will work directly with an instructor.

Art - Design (ARTD)

Contact the Art Department for further information.
(760) 744-1150, ext. 2302
Office: D-14

Associate in Science Degrees -
AS Degree requirements are listed in Section 6 (green pages).
• Graphic Design

PROGRAM OF STUDY

Graphic Design

Prepares students in basic skills necessary to prepare a portfolio for application to Graphic Design, Environmental Design, and Packaging Design programs at 4 year schools. In addition, develops creative design ability and conceptual skills in the printed media, motion graphics, and web design.

A.S. DEGREE MAJOR

Program Requirements

ART 104	Design and Composition	3
ART 166	History of Art II - Survey of Western Art	3
ART 200	Color Theory	3
ARTI 100	Concept Sketching	3
ARTD 100	Graphic Design I	3
ARTD 150	Digital Concepts and Techniques in Art	3
ARTD 200	Graphic Design II - Lettering and Layout	3
ARTD 210	Typography Design	3
ARTD 220	Motion Design	3
ARTI 246	Digital 3D Design and Modeling	3
	Final Art Portfolio Review	0

Electives (Select 6-7 units)

ARTI 247	Digital 3D Design and Animation	3
ARTI 248	Digital 3D Design and Sculpture	3
ARTI 220	Illustration II, Digital Techniques	3
ART 120	Foundations of Life Drawing	3
PHOT 100	Elementary Film and Darkroom Photography	3
BMGT 105	Small Business Management	3
CE 100	Cooperative Education	1 - 4
TOTAL UNITS		**36 - 37**

Graphic Design A.S. Degree Major is also listed in Art.

COURSE OFFERINGS

Individual courses are not repeatable. State Regulations (Title 5, Sections 55040-55041) also limit the number of of times a student may take courses with related content and similar primary educational activities. Therefore, some combinations of course work in Art – Design have limitations on the number of times a student may enroll. Specific information about enrollment limitations for Art – Design classes is available at http://www.palomar.edu/schedule/restrictions.htm

ARTD 100   Graphic Design I   (3)
1½ hours lecture - 4½ hours laboratory
Transfer acceptability: *CSU*
Design principles as they apply to graphic communication. Abstract and pictorial Design for the printed media. Film and architectural signage. Lettering is applied as an abstract Design element.

ARTD 150   Digital Concepts and Techniques in Art   (3)
1½ hours lecture - 4½ hours laboratory
Transfer acceptability: *CSU; UC*
An overview of vector based and pixel based computer applications, and how they are used in a creative environment. Understanding of the underlying logic of computer software will be taught with an emphasis on the role of the computer in all forms of modern art-making. Students will learn how to use the computer as a tool effectively while developing their own method of creating digital artwork. Cross-platform issues will be addressed, as well as file preparation for various output media.

ARTD 200   Graphic Design II – Lettering and Layout   (3)
1½ hours lecture - 4½ hours laboratory
Prerequisite: *A minimum grade of 'C' in ARTD 100*
Recommended preparation: *ARTD 150*
Transfer acceptability: *CSU*
The study of the historical roots and nomenclature of lettering forms and the development of grid systems to aid in the development of successful layout designs. Design and assembly utilizing both hand skills and computer software will be taught.

ARTD 210   Typography Design   (3)
1½ hours lecture - 4½ hours laboratory
Recommended preparation: *ARTD 150*
Transfer acceptability: *CSU*
Introduction to the historical roots and contemporary technology of typography. Provides a critical analysis of technical processes and elements through assignments that define its symbolic and communicative aspects.

ARTD 220   Motion Design   (3)
1½ hours lecture - 4½ hours laboratory
Transfer acceptability: *CSU*
An introduction to the concepts and techniques of animation and multimedia for personal computers using After Effects. Emphasis will be placed on the role of the artist and in the development process and as a key link in determining the success of the final project.

Art - Illustration (ARTI)

Contact the Art Department for further information.
(760) 744-1150, ext. 2302
Office: D-14

Associate in Science Degrees -
AS Degree requirements are listed in Section 6 (green pages).
• Illustration

PROGRAMS OF STUDY

Illustration

Provides students with specific skills necessary to prepare a portfolio for application to Illustration programs at 4-year schools. In addition develops creative conceptual and Illustrative skills for use in advertising and story Illustration.

A.S. DEGREE MAJOR

Program Requirements		Units
ART 104	Design and Composition	3
ART 120	Foundations of Life Drawing	3
ART 166	History of Art II	3
ART 200	Color Theory	3
ARTD 150	Digital Concepts and Techniques in Art	3
ARTD 220	Motion Design	3
ARTI 100	Concept Sketching	3
ARTI 210	Illustration I	3
ARTI 220	Illustration II, Digital Techniques	3
ARTI 246	Digital 3D Design and Modeling	3
	Final Art Portfolio Review	0

Electives (Select 6 units)		
ART 121	Intermediate Life Drawing	3
ART 125	Introduction to Portraiture	3
ART 220	Introduction to Painting	3
ART 235	Watercolor Painting I	3
ARTD 100	Graphic Design I	3
ARTI 247	Digital 3D Design and Animation	3
ARTI 248	Digital 3D Design and Sculpture	3
BMGT 105	Small Business Management	3
TOTAL UNITS		**36**

Illustration A.S. Degree Major is also listed in ART.

COURSE OFFERINGS

Individual courses are not repeatable. State Regulations (Title 5, Sections 55040-55041) also limit the number of times a student may take courses with related content and similar primary educational activities. Therefore, some combinations of course work in Art – Illustration have limitations on the number of times a student may enroll. Specific information about enrollment limitations for Art – Illustration classes is available at http://www.palomar.edu/schedule/restrictions.htm

ARTI 100   Concept Sketching   (3)
1½ hours lecture - 4½ hours laboratory
Transfer acceptability: CSU
Visual concept development through dynamic sketching, ranging from preparatory to presentation drawings. Included is the study of perspective and drawing of mechanical and natural forms and environments by the use of line and value. Emphasis is placed on the progressive development of visual ideas.

ARTI 210   Illustration I - Rendering Techniques   (3)
1½ hours lecture - 4½ hours laboratory
Transfer acceptability: CSU
Content reflects the types of assignments an illustrator may encounter in the industry, using a variety of traditional media and techniques. Contemporary principles of concept development and problem solving will be explored, using stylization, design, composition and color as methods of communication. Accurate analysis, historical reference, oral and graphic presentation of ideas, sketches and finished art will be stressed.

ARTI 220   Illustration II – Digital Techniques   (3)
1½ hours lecture - 4½ hours laboratory
Prerequisite: A minimum grade of 'C' in ARTI 210
Transfer acceptability: CSU
A course for advanced illustration students that focuses on creating non-traditional professional level commercial artwork. Media experimentation, and combination of traditional methods with digital applications is used to create finished pieces that are conceptually and visually interesting and strong. Students are encouraged to develop and strengthen personal and distinctive approaches to Illustration. Portfolio preparation for admission to high quality 4-year art and design programs, or for entry into to the work force will be examined and applied. Students will also gain insight into self-promotion and marketing strategies. Contracts, self-employment issues and billing procedures will be explained.

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

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

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

Astronomy (ASTR)

Contact the Earth, Space, and 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