

Palo Verde College

Program Outline Report

Program Basics

Program Title:

Associate of Arts in Liberal Arts, Emphasis in Mathematics and Science

Program Status:

Active from 2026-2027 Fall (2026FA)

Department:

Math and Science

Award Type:

A.A. Degree Major (Credit)

Program/Catalog Description

The Associate Degree in Liberal Arts is designed for students who wish to have a broad knowledge of liberal arts and sciences plus additional coursework in an "Area of Emphasis." This area of emphasis would be an ideal choice for students who plan on transferring to the California State University (CSU) or University of California (UC) as students can satisfy general education requirement, plus focus on transferable coursework that relates to majors at these institutions. Please consult with a counselor for information regarding your intended major at the specific college or university of your choice. Along with the area of emphasis requirements, students must also fulfill the CalGETC General education pattern to complete all degree requirements.

Control Number:

18000

Credential ID:

No value

Transferability:

No value

(SP01) Program TOP Code:

4902.00

(SP01) Program TOP Code:

Biological and Physical Sciences (and Mathematics)

(SP02) Student Program Award:

Associate of Arts (A.A.) degree

Maximum Credits:

61

Minimum Credits:

60

Curriculum Committee Approval Date:

12/11/2025

Board of Trustees Approval Date:

01/13/2026

External Review Approval Date:

01/13/2026

Proposal Details

Proposal Start:

2026-2027 Fall (2026FA)

What changes have been made to the program:

Updating to pull in Phase 2 A and B CCN.

Program Justification:

No value

Submission Rationale

No value

Program Requirements

Associate of Arts in Liberal Arts, Emphasis in Mathematics and Science (Total 60)

Complete the following number of credits: 60

Area of Emphasis: A minimum of 18 units is required in the Area of Emphasis listed below. For depth of study, 2 or more courses in one discipline is required. Courses selected may also be used to fulf (Total 18)

Complete the following number of credits: 18

ANTHC1001 - Introduction to Biological Anthropology	3
ASTRC1001 - Introduction to Astronomy	3
AST105 - Astronomy: The Solar System	4
AST110 - Astronomy: Beyond the Solar System	4
BIOLC1001 - Introduction to Biology	4
BIOLC1001L - Introduction to Biology Lab	1
BIO111 - Basic Microbiology	5
BIO190 - Biology Sequence I for Majors	5
BIO191 - Biology Sequence II for Majors	5
BIO210 - Human Anatomy	4
BIO211 - Human Physiology	5
CHE101 - Introduction to General Chemistry	4
CHE109 - Chemistry for Health Sciences and Nursing Disciplines	5
CHE210 - General Chemistry I	5
CHE211 - General Chemistry II	5
GGR101 - Physical Geography	4
GGR102 - Physical Geography Laboratory	1
GGR103 - World Geography	3
GEL101 - Physical Geology	4
GEL102 - Physical Geology Laboratory	1
GEL103 - Environmental Geology	4
GEL104 - Environmental Geology Lab	1
GEL105 - Natural Hazards and Disasters	4
GEL106 - Natural Hazards and Disasters Laboratory	1
STATC1000 - Introduction to Statistics	4
MAT108 - Liberal Arts Mathematics	3
MAT110 - College Algebra	4
PHY100 - Physics Concepts	3
PSY155 - Introduction to Statistical Analysis for the Social Sciences	3
SOC120 - Research Methods in Sociology	3
CalGETC: Transfer General Education Requirements	34-38

Recommended Sequences

No value

Program Outcomes

Associate of Arts in Liberal Arts, Emphasis in Mathematics and Science

PSLO

Performance

1. Acquired fundamental grounding in communication, critical thinking, scientific inquiry, and quantitative reasoning, the arts, literature and humanities, social, political and economic institutions, and self-development. 70

2. Acquired fundamental knowledge and skills in various disciplines constituting the Mathematics and Science. 70

Program Narrative

Narrative Item 1. Program Goals and Objectives

The Associate degree in Mathematics and Science is designed for students who wish to have a broad knowledge of Mathematics and Sciences, plus additional coursework in an "Area of Emphasis."

This area of emphasis would be an ideal choice for students who plan on transferring to the California State University (CSU) or University of California (UC), as students can satisfy general education requirement, plus focus on transferable coursework that relates to STEM majors at these institutions.

The Mathematics and Science Program serves to fulfill transferable course requirements and/or electives, as well as a transferable associate's degree. This serves Institutional **Goal 1** from the Integrated Strategic Plan (2013-2016), which states "Deliver and continuously improve upon quality educational programs, emphasizing student learning leading to certification, conferral of associate degrees, transfer to four-year institutions, and personal growth and career enhancement."

Narrative Item 2. Catalog Description

The Associate Degree in Liberal Arts is designed for students who wish to have a broad knowledge of liberal arts and sciences plus additional coursework in an "Area of Emphasis." This area of emphasis would be an ideal choice for students who plan on transferring to the California State University (CSU) or University of California (UC) as students can satisfy general education requirement, plus focus on transferable coursework that relates to majors at these institutions. Please consult with a counselor for information regarding your intended major at the specific college or university of your choice.

Along with the area of emphasis requirements, students must also fulfill the CalGETC General education pattern to complete all degree requirements.

Narrative Item 3. Program Requirements

Math & Science

General Education Requirements:

Area of Emphasis: A minimum of 18 units is required in the Area of Emphasis listed below. For depth of study, 2 or more courses in one discipline is required. Along with the core requirements, students must also complete the CalGETC General Education Pattern in order to receive the degree.

ANT 100

AST101, 105, 110

BIO100, 101, 111, 190, 191, 210, 211

CHE101, 109, 210, 211

GGR 101, 102, 103

GEL101, 102, 103, 104, 105, 106

MAT, 108, 110, STAT C1000

PHY100

PSY155

SOC 120

ASSOCIATE IN ARTS: Math & Science

DEGREE REQUIREMENTS GENERAL EDUCATION

DESCRIPTION:

Required Core: 18 units

PROGRAM STUDENT LEARNING OUTCOMES

SEMESTER BY SEMESTER PROGRAM PLAN FOR FULL TIME STUDENTS

Plans will be modified to fit the needs of part-time students by adding additional semesters.

*Pre-requisite:	Co-requisite:	Advisory:	Recommended:
-----------------	---------------	-----------	--------------

Semester 1	Credits	Advising Notes
STAT C1000	4	
ENGL C1000	4	
BIO 190/191	4	Soon to be BIO 190 & 191
GES 115/HEA 140	3	
PSYC C1000	3	
Total Credits:	18	
Semester 2	Credits	Advising Notes
ENGL C1001	3	
BIO 211	5	
SPE 101	3	
AREA C1	3	
CHE 101	4	
Total Credits:	18	
Semester 3	Credits	Advising Notes
GGR 101	4	
BIO 210	4	
SCIENCE elective	3-5	
SCIENCE elective	3-5	
Total Credits:	14-18	
Semester 4	Credits	Advising Notes
SCIENCE elective	3-5	
SCIENCE elective	3-5	
AREA C1 or C2	3-5	
POLS C10005/HIS 130/HIS 140	3	PICK ONE COURSE TO MEET CSU GRAD REQUIREMENTS
Total Credits:	12-18	

**Summer session courses are optional and may not be required for your program of study.*

Narrative Item 4. Master Planning

The Mathematics and Science Program promotes student success and STEM education that enhances personal and professional growth. In addition, this program feeds into the Nursing program, allied health fields, and natural sciences. The Mathematics and Science program addresses and promotes critical thinking, scientific methods, and problem solving.

The present program goals contribute to developing two-year course planning and scheduling procedures to eliminate the delay of the students' progress program completion.

The Mathematics and Science division supports the mission of the college that states "Palo Verde College provides opportunities for personal and professional growth to a diverse and unique community of learners in an academic environment committed to student success and equity by supporting student achievement of basic skills, certificate, degree, university transfer, and career goals. *Board approved Feb. 12, 2019 "*

The Mathematics and Science program is oriented around Palo Verde's Horizon 2023 strategic plan by creating, providing, and implementing exemplary educational services and instructional programs that serves the needs of our diverse and unique student population and community. It continues to maintain focus on "accreditation and use accreditation Standards to guide integrated strategic planning, program review, student learning outcomes assessment to achieve demonstrated continuous improvements in all programs and services". (Horizon 2023 Strategic Plan)

We will continue using modern teaching technologies to instruct and support our student's education and effective learning.

Narrative Item 5. Enrollment and Completer Projections

Significant Findings from the Program Review Cycle 2018-2020, shows that both veteran students and disabled student have significantly improved their average completion rate over the years of the report and currently have the highest completion rate. On the other hand, African American and Hawaiian/Native American students have significantly lower average completion rates, over the years of the report, than the other groups.

Overall, the Mathematics and Science program enrollment and completion rates have increased slightly. In the last review cycle the enrollment rates increased steadily in the departments of the Mathematics and Science program. In addition, according to the last review cycle, the completion rates have slightly declined compared to the previous cycle.

It is expected that the enrollment rates in the Mathematics and Science program will improve with the implementation of the Registered Nursing (RN) program.

The initiation of the RN program will result in improving the completion rates. Additionally, the mathematics and science division will recommend students to take advantage of the supporting opportunities available at the Palo Verde College.

Narrative Item 6. Place of Program in Curriculum/Similar Programs

The Mathematics and Science division at Palo Verde College focuses on STEM subjects. The division is made up of a variety of diverse disciplines that provide students with unique academic and career opportunities in science and technology. Further, it serves populations of students from diverse backgrounds who take mathematics/science for professional enrichment, nursing, science, medicine, college transfer. There are students who obtain Associate Degrees of Arts in Mathematics and Science too. Students who have taken courses within Mathematics and Science leave better prepared, to apply skills upon graduating in relevant fields. Furthermore, the Mathematics and Science division serves the local high school students, by offering pre-college level basic skills mathematics and science.

Narrative Item 7. Similar Programs at Other Colleges in Service Area

Palo Verde College's (PVC) is the only higher education institution accessible and serving to the communities in Blythe and surrounding areas.

The college serves local community students and inmate students from local prisons, and other correctional institutions across southern California, through distance education modality, where students can complete the degree and certificate programs offered by the college.

Our main emphasis is on preparing students for college transfer coursework and professional career education. In keeping with the college mission, the Mathematics and Science division is committed to student success and equity.