

### COUNSELING CENTER ADVISING

#### AS-Associate Degree

### PHYSICAL SCIENCES

- Maximum of 12 Pass/No Pass units accepted
- Minimum of 12 units must be completed at AVC (credit earned by examination will not be included in these 12 units)
- Any particular course can count only once toward the degree—either toward the major, the GE requirements, or as an elective
- Refer to catalog or online website for course listings, descriptions, and suggested course sequence if available.
- Certificate in Physical Sciences is not available
- Students who intend to transfer are strongly encouraged to complete either the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breath (CSU GE).

Major Required Courses	units
CHEM 110, 120, General Chemistry	10
MATH 150, 160, Calculus and Analytic Geometry	9

#### Program Electives

Select at least 4 units from the following:

ASTR 101, 101L, Astronomy/Lab	4
GEOG 101, 101L, Physical Geography/Lab	4
GEOL 101, 101L, Physical Geology/Lab or GEOL 102, Historical Geology	3-4
PHYS 101, 102, Introductory Physics	8
PSCI 101, Physical Science	4

**Units Required for Major 23**

#### other requirements for degree

General Education	21-27
Proficiency (See Proficiency Requirements) *	
Electives	10-16

**Minimum Units Required 60**

\*Fulfilling proficiencies will not require any extra units if the competencies are demonstrated by including the required courses in the general education, or major requirements, or by satisfying the reading proficiency through AVC's policy.

### General Education Requirements

At least 3 units from each of the following areas below: A, B, C, D1, D2, E, and F.

**Minimum Total GE Units Required 21**

#### Area A Natural Sciences (min. 3 units)

ANTH 101, 101L  
 ASTR 101, 101L  
 BIOL 100, 101, 102, 103, 104, 110, 120, 201, 202, 204, 205  
 CHEM 101, 102, 110  
 ELTE 101  
 ERSC 101  
 GEOG 101, 101L, 102, 102L  
 GEOL 101, 101L, 102, 102L  
 PHYS 101, 102, 110, 120, 211  
 PSCI 101

#### Area B Social & Behavioral Sciences

(min. 3 units)

AJ 201, 204, 206  
 ANTH 102, 103, 112, 140  
 BUS 101  
 CFE 102  
 COMM 217  
 ECON 100, 101, 102, 110  
 GEOG 105, 106, 110  
 HIST 101, 102, 104, 105, 107, 108, 110, 111, 113, 114, 116, 118, 119  
 POLS 101, 103, 200, 201, 202, 203  
 PSY 101, 201, 212, 230, 232, 233, 234, 235, 236  
 SOC 101, 105, 110, 111, 112, 115, 116, 120

#### Area C Humanities (min. 3 units)

ART 100, 101, 102, 103, 104, 110, 113, 132, 135, 136, 137, 140, 145, 150, 210, 213  
 CHIN 101, 102, 201, 202  
 COMM 103, 112, 114, 214  
 DA 101  
 DFST 101, 102, 105, 201, 202  
 ENGL 102, 111, 112, 113, 221, 222, 225, 227, 230, 231, 235, 236, 240, 242, 246, 250, 253, 256, 257, 259, 265, 279  
 FREN 101, 102, 201, 202, 203  
 FTV 101, 103, 107, 108, 201, 203, 251, 261  
 GER 101, 102, 201, 202  
 HIST 115  
 ID 150, 201  
 LATN 101, 102, 201  
 MUS 101, 105, 111, 131, 132, 151, 153, 185, 231, 232, 251A, 251B, 253A, 253B  
 MUSC 102, 103, 107  
 PHIL 105, 106, 108, 109  
 PHOT 107  
 PHTC 101, 150, 201  
 SPAN 101, 110SS, 102, 201, 202, 210SS, 220SS  
 THA 101, 102, 103, 110, 115A, 115B, 116A, 116B, 117A, 117B, 118A, 118B, 130, 225, 239

#### Area D Language & Rationality

(min. 3 units from (1) and 3 units from (2))

1. *English Composition*: Courses fulfilling the written composition requirement shall be designed to include both expository and argumentative writing.

ENGL 101, 101SL

2. *Communication and Analytical Thinking*

BUS 113  
 CA 103  
 CIS 101, 111, 141, 157  
 COMM 101, 103, 107, 109, 112, 114, 115, 217, 219  
 ENGL 102, 103  
 GEOG 201, 205  
 MATH 102, 115, 116, 120, 124, 128, 135, 140, 148, 150, 160, 220, 230, 250  
 PHIL 101, 106, 110, 201

#### Area E - Additional Breadth

(min. 3 units)

From areas A\*\*, B\*\*, C\*\*, D2 \*\*or CFE 102

COMM 103, 107, 219  
 HD 100, 101, 102, 103, 105  
 HE 101, 120, 201  
 ID 100, 120  
 LIB 105, 107  
 NF 100, 102, 103, 110, 150  
 PSY 212  
 SOC 111, 116  
 Any DA 102-205, except DA 107A-C, 108, 109 and 111  
 Any KIN activity course(s) from KIN 101-180, or up to 4 units for military experience.

\*\* Course must be taken from a discipline not previously selected.

#### Area F Diversity Studies (min. 3 units)

ANTH 112  
 BUS 212  
 CFE 116  
 COMM 114, 217, 219  
 ECON 110  
 ENGL 250, 253, 256, 257, 259  
 FTV 201, 203  
 HE 201  
 HIST 110, 111, 113  
 MGT 212  
 MUSC 107  
 POLS 202  
 SOC 105, 110, 116  
 THA 239

#### Proficiency Requirements

Proficiency requirements exist for the areas of Reading, Writing and Math. Students must demonstrate competency in each of these areas in order to be eligible for the associate degree.

#### A. READING

Eligibility for College Level Reading (AVC assessment) or completion of READ 099 with a minimum grade of "P" (Pass), or completion of an Associate Degree or higher from a regionally accredited institution of higher education.

#### B. WRITING

Completion of ENGL 101 or ENGL 101SL with a minimum grade of "C." NOTE: ENGL 101 may be taken with the Pass/No Pass option; however, students are cautioned that other colleges and universities may not accept ENGL 101 courses taken on a Pass/No Pass basis, especially for satisfaction of general education and major requirements. Students planning to transfer should check college catalogs for applicable policies.

#### C. MATHEMATICS

Completion of MATH 102 or higher or CIS 121 with a satisfactory grade or placement by AVC assessment into a math course higher than MATH 102.

#### Electives

The remaining number of units (up to a minimum of 60) are considered electives. Any course that has already been counted toward (1) the general education requirements, or (2) the major, cannot be used as an elective. Any course with a designation

of "AVC" at the end of a course description can be used as an elective.

### Grade Point Average Requirement

An overall grade point average of 2.0 ("C" average) is required.

**Double Counting:** While a course might satisfy more than one general education requirement, it may not be counted more than once for these purposes. A course may be used to satisfy both a general education requirement and a major or area of emphasis requirement.

### Residence Requirement

Of the required 60 units, "at least 12 semester units must be completed in residence at the college granting the degree." Title 5, Section 54000 et seq. Title 5 of the California Code of Regulations is available at <http://ccr.oal.ca.gov> and in the Antelope Valley College Library.

### Requirements for Two or

#### More Associate Degrees

To be eligible for multiple associate degrees, a student must have completed all of the graduation requirements for each degree.

### Transfer

Students planning to continue studies at a four-year college or university after AVC should visit the Transfer Resource Center and consult with a counselor as soon as possible to develop a plan of studies. Additional information on official transfer articulation agreements from AVC to many CSU/UC campuses can be found at the following Web site: [www.assist.org](http://www.assist.org)

Transferability of courses to the CSU or UC systems is indicated at the end of a course description by the notation "(UC, CSU)." For the transferability of courses to all other universities, please consult with a counselor or the Transfer Resource Center.

The "Catalog Rights Policy" sets forth the criteria used for determining the degree requirements under which students may graduate. Please refer to the AVC Catalog for a detailed description or consult with a counselor

For an educational plan, please consult with a counselor. To obtain counseling services please call: (661) 722-6300 ext. 6338

#### Prerequisite Completion

If a course is listed as a prerequisite for another course, that prerequisite course must be completed with a satisfactory grade in order to enroll in the next course. According to Title 5, Section 55200(d), a satisfactory grade is a grade of "A," "B," "C" or "P". Students who enroll in classes for which they do not meet the prerequisites will be involuntarily dropped. Students will be notified of this involuntary drop.

Antelope Valley College's website: [www.avc.edu](http://www.avc.edu)  
To contact the Math, Science, and Engineering Division, please call: 661-722-6300 ext. 6415

### ASTR 101 \*ASTRONOMY

**Prerequisite:** Completion of MATH 102.

**Advisory:** Eligibility for College Level Reading and ENGL 101/ENGL 101SL.  
(CSU, UC, AVC)

### ASTR 101L \*ASTRONOMY LABORATORY

**Prerequisite:** Completion of MATH 102, and Completion of or concurrent enrollment in ASTR 101.

**Advisory:** Eligibility for College Level Reading and ENGL 101/ENGL 101SL.  
(CSU, UC, AVC)

### CHEM 110 GENERAL CHEMISTRY

**Prerequisite:** Completion of MATH 102.

**Advisory:** Completion of CHEM 101, and Eligibility for College Level Reading and ENGL 099  
(CSU, UC, AVC)

### CHEM 120 GENERAL CHEMISTRY

**Prerequisite:** Completion of CHEM 110 and MATH 140.

**Advisory:** Eligibility for College Level Reading and ENGL 101/ENGL 101SL.  
(CSU, UC, AVC)

### GEOG 101 \*PHYSICAL GEOGRAPHY: EARTH'S SURFACE LANDSCAPES

**Prerequisite:** Completion of MATH 102.

**Advisory:** Eligibility for College Level Reading, and ENGL 101/ENGL 101SL.  
(CSU, UC, AVC)

### GEOG 101L \*PHYSICAL GEOGRAPHY LAB: EARTH'S SURFACE LANDSCAPES

**Prerequisite:** Completion of or concurrent enrollment in GEOG 101 and Completion of MATH 102.

**Advisory:** Eligibility for College Level Reading, and ENGL 101/ENGL 101SL.  
(CSU, UC, AVC)

### GEOL 101 \*PHYSICAL GEOLOGY

**Advisory:** Eligibility for College Level Reading, ENGL 101/ENGL 101SL and MATH 102.  
(CSU, UC, AVC)

### GEOL 101L \*PHYSICAL GEOLOGY LAB

**Corequisite:** Completion of or concurrent enrollment in GEOL 101.

**Advisory:** Eligibility for College Level Reading, ENGL 101/ENGL 101SL and MATH 102.  
(CSU, UC, AVC)

### GEOL 102 \*HISTORICAL GEOLOGY

**Prerequisite:** Completion of MATH 102.

**Advisory:** Completion of or concurrent enrollment of GEOL 101, and Eligibility for College Level Reading and ENGL 101/ENGL 101 SL.  
(CSU, UC, AVC)

### MATH 065 BASIC MATH

**Advisory:** Eligibility for ENGL 099.

### MATH 070 ELEMENTARY ALGEBRA

**Prerequisite:** Eligibility for MATH 070 (AVC assessment) or Completion of MATH 065.  
**Advisory:** Eligibility for READ 099.

### MATH 102 \*INTERMEDIATE ALGEBRA

**Prerequisite:** Eligibility for MATH 102 (AVC assessment) or Completion of MATH 070.

**Advisory:** Eligibility for READ 099.  
(AVC)

### MATH 105 GEOMETRY AND METHODS OF PROOF

**Prerequisite:** Eligibility for MATH 105 (AVC assessment) or Completion for MATH 102.

**Advisory:** Eligibility for READ 099.  
(CSU, AVC)

### MATH 135 \*PLANE TRIGONOMETRY

**Prerequisite:** Completion of MATH 102, or Eligibility for MATH 135 (AVC Assessment).  
**Advisory:** Concurrent enrollment in MATH 105, Eligibility for ENGL 101/ENGL 101SL and College Level Reading.  
(CSU, AVC)

### MATH 140 \*PRECALCULUS

**Prerequisite:** Completion of MATH 105 and 135, or Eligibility for MATH 140 (AVC Assessment).

**Advisory:** Eligibility for College Level Reading.  
(CSU, UC, AVC)

### MATH 150 CALCULUS AND ANALYTIC GEOMETRY

**Prerequisite:** Completion of MATH 140 or Eligibility of Math 150 (AVC Assessment).

**Advisory:** Eligibility for College Level Reading.  
(CSU, UC, AVC)

### MATH 160 CALCULUS AND ANALYTIC GEOMETRY

**Prerequisite:** Completion of MATH 150.

**Advisory:** Eligibility for College Level Reading.  
(CSU, UC, AVC)

### PSCI 101 \*PHYSICAL SCIENCE

**Advisory:** Completion of ENGL 10/ENGL 101SL and MATH 102.  
(CSU, UC, AVC)

### PHYS 101 INTRODUCTORY PHYSICS

**Advisory:** Completion of MATH 135 or MATH 140, and Eligibility for College Level Reading and ENGL 101/ENGL 101 SL.  
(CSU, UC, AVC)

### PHYS 102 INTRODUCTORY PHYSICS

**Prerequisite:** Completion of PHYS 101.  
(CSU, UC, AVC)

#### Advisory:

A condition of enrollment that a student is advised, but not required, to meet before or in conjunction with enrollment in a course or educational program.

#### Prerequisite:

A condition of enrollment that a student is required to meet in order to demonstrate current readiness for enrollment in a course or educational program. Prerequisites are enforced and a student will be blocked from enrolling or involuntarily dropped after enrolling if the student does not meet the stated prerequisite. A student must complete a course prerequisite with a satisfactory grade of A, B, C or P (pass).

#### Corequisite:

A condition of enrollment consisting of a course that a student is required to simultaneously take in order to enroll in another course. Corequisites are enforced and a student will be blocked from enrolling if the student does not meet the stated requisite.