



2018-2019 PROGRAM REQUIREMENTS

Degree: Associate of Science

Major: Liberal Arts

Emphasis: Biology

About This Major . . .

The Associate of Science (A.S.) degree is designed for students who intend to continue their education and obtain a baccalaureate degree. The A.S. is the appropriate choice for students who will take upper division coursework in mathematics, biological sciences, and physical sciences. The Essential Learning requirements of this degree program meet the Colorado Statewide General Education Core and the lower division general education requirements at most public institutions in Colorado.

In the Biology Program students choose courses from four areas: cell, molecular, and developmental biology; anatomical and physiological biology; organismal biology; or ecology, evolution, and systematics. Graduates of our program with an A.S. degree may then seek to continue their education to pursue careers in teaching, plant pathology, wildlife biology, cell biology or biotechnology, among just a few of the career options, or may use their A.S. to support careers in other disciplines.

For more information on what you can do with this major, go to <http://www.coloradomesa.edu/career/whatmajor.html>.

All CMU associate graduates are expected to demonstrate proficiency in critical thinking, communication fluency, quantitative fluency, and specialized knowledge/applied learning. In addition to these campus-wide student learning outcomes, graduates of this major will be able to:

1. Demonstrate a basic knowledge of the main areas of biology (including plant and animal biology, evolution, ecology, cell biology and genetics) and the ability to apply this knowledge to address new questions. (Specialized Knowledge)
2. Gather, organize and analyze scientific data and draw logical conclusions. (Critical Thinking)
3. Demonstrate effective communication skills, both in writing and orally in Biology. (Communication Fluency)

Advising Process and DegreeWorks

This document is intended for informational purposes to help determine what courses and associated requirements are needed to earn a degree. The suggested course sequencing outlines how students could finish degree requirements. Some courses are critical to complete in specific semesters, while others may be moved around. Meeting with an academic advisor is essential in planning courses and altering the suggested course sequencing. It is ultimately the student's responsibility to understand and fulfill the requirements for her/his intended degree(s).

DegreeWorks is an online degree audit tool available in MAVzone. It is the official record used by the Registrar's Office to evaluate progress towards a degree and determine eligibility for graduation. Students are responsible for reviewing their DegreeWorks audit on a regular basis and should discuss questions or concerns with their advisor or academic department head. Discrepancies in requirements should be reported to the Registrar's Office.

Graduation Process

Students must complete the following in the first two months of the semester prior to completing all requirements:

- Review their DegreeWorks audit and create a plan that outlines how unmet requirements will be met in the final semester.
- Meet with their advisor and modify the plan as needed. The advisor must approve the final plan.
- Submit the "Intent to Graduate" form to the Registrar's Office to officially declare the intended graduation date and commencement ceremony plans.
- Register for all needed courses and complete all requirements for each degree sought.

Submission deadlines and commencement details can be found at <http://www.coloradomesa.edu/registrar/graduation.html>.

INSTITUTIONAL DEGREE REQUIREMENTS

The following institutional degree requirements apply to all CMU Associate of Science (AS) degrees. Specific programs may have different requirements that must be met in addition to institutional requirements.

- 60 semester hours total.
- Students must complete a minimum of 15 of the final 30 semester hours of credit at CMU.
- 2.00 cumulative GPA or higher in all CMU coursework.
- A grade of "C" or higher must be earned in all Essential Learning courses in order to be accepted for transfer under the Colorado Core Transfer Consortium General Education curriculum or gtPathways, Colorado's guaranteed transfer program.
- A course may only be used to fulfill one requirement for each degree/certificate.
- No more than six semester hours of independent study courses can be used toward the degree.
- Non-traditional credit, such as advanced placement, credit by examination, credit for prior learning, cooperative education and internships, cannot exceed 15 semester credit hours for an associate of science degree; A maximum of 6 of the 15 credits may be for cooperative education, internships, and practica.
- Pre-collegiate courses (usually numbered below 100) cannot be used for graduation.
- Capstone exit assessment/projects (e.g., Major Field Achievement Test) requirements are identified under Program-Specific Degree Requirements.
- The Catalog Year determines which program sheet and degree requirements a student must fulfill in order to graduate. Visit with your advisor or academic department to determine which catalog year and program requirements you should follow.
- See "Requirements for Undergraduate Degrees and Certificates" in the catalog for a complete list of graduation requirements.

PROGRAM-SPECIFIC DEGREE REQUIREMENTS

- A grade of "C" or higher must be earned toward the major content area.

ESSENTIAL LEARNING REQUIREMENTS (31 semester hours)

See the current catalog for a list of courses that fulfill the requirements below. If a course is an Essential Learning option and a requirement for your major, you must use it to fulfill the major requirement and make a different selection for the Essential Learning requirement.

English (6 semester hours, must receive a grade of "C" or better and must be completed by the time the student has 60 semester hours.)

- ENGL 111 - English Composition (3)
- ENGL 112 - English Composition (3)

Mathematics (3 semester hours, must receive a grade of "C" or better, must be completed by the time the student has 60 semester hours.)

- MATH 113 - College Algebra (4) or higher
3 credits apply to the Essential Learning requirements and 1 credit applies to elective credit.

Humanities (3 semester hours)

- Select one Humanities course (3)

Social and Behavioral Sciences (6 semester hours)

- Select one Social and Behavioral Sciences course (3)
- Select one Social and Behavioral Sciences course (3)

Natural Sciences (7 semester hours, one course must include a lab) CHEM 131/131L and CHEM 132/132L recommended.

- Select one Natural Sciences course (3)
- Select one Natural Sciences course with a lab (4)

History (3 semester hours)

- Select one History course (3)

Fine Arts (3 semester hours)

- Select one Fine Arts course (3)

OTHER LOWER-DIVISION REQUIREMENTS

Wellness Requirement (2 semester hours)

- KINE 100 - Health and Wellness (1)
- Select one Activity course (1)

ASSOCIATE OF SCIENCE: BIOLOGY REQUIREMENTS (24 semester hours, a grade of "C" or better must be earned in all courses.)

Core Classes (16 Semester Hours)

- BIOL 105 - Attributes of Living Systems (3)
- BIOL 105L - Attributes of Living Systems Laboratory (1)
- BIOL 106 - Principles of Animal Biology (3)
- BIOL 106L - Principles of Animal Biology Laboratory (1)
- BIOL 107 - Principles of Plant Biology (3)
- BIOL 107L - Principles of Plant Biology Laboratory (1)
- BIOL 208 - Fundamentals of Ecology & Evolution (3)
- BIOL 208L - Fundamentals of Ecology & Evolution Laboratory (1)

Required Biology Specialization Courses (8 Semester Hours) To be selected in consultation with student's advisor.

- _____
- _____
- _____
- _____
- _____
- _____

GENERAL ELECTIVES (All college level courses, not listed above, that will bring your total semester hours to 60 hours. Up to 3 hours may be needed.)

- MATH 113 - College Algebra (1)
- _____
- _____
- _____
- _____
- _____
- _____
- _____

SUGGESTED COURSE SEQUENCING

Freshman Year, Fall Semester: 15 credits

- BIOL 105 - Attributes of Living Systems (3)
- BIOL 105L - Attributes of Living Systems Laboratory (1)
- ENGL 111 - English Composition (3)
- MATH 113 - College Algebra (4)
- Essential Learning - Fine Arts (3)
- KINE 100 - Health and Wellness (1)

Freshman Year, Spring Semester: 16 credits

- BIOL 106 - Principles of Animal Biology (3)
 - BIOL 106L - Principles of Animal Biology Laboratory (1)
 - ENGL 112 - English Composition (3)
 - Essential Learning - Humanities (3)
 - Essential Learning - Social and Behavioral Sciences (3)
 - Essential Learning - History (3)
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Sophomore Year, Fall Semester: 15 credits

- BIOL 107 - Principles of Plant Biology (3)
- BIOL 107L - Principles of Plant Biology Laboratory (1)
- BIOL 208 - Fundamentals of Ecology & Evolution (3)
- BIOL 208L - Fundamentals of Ecology & Evolution Laboratory (1)
- Biology Specialization Selection (4)
- Essential Learning - Natural Science without lab (3)

Sophomore Year, Spring Semester: 14 credits*

- Biology Specialization Selection (3)
- Essential Learning - Natural Science with lab (4)
- Essential Learning - Social and Behavioral Sciences (3)
- Wellness Requirement - Activities Course (1)
- General Elective (3)

*Students that intend to continue with Colorado Mesa University should take ESSL 290 - Maverick Milestone and ESSL 200 - Essential Speech during the final semester of their Associate of Science work.