



2015-2016 PETITION/PROGRAM SHEET

Degree: Associate of Science

Major: Liberal Arts

Emphasis: Biology

About This Emphasis . . .

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)

NAME: _____ STUDENT ID #: _____

LOCAL ADDRESS AND PHONE NUMBER: _____

_____ () _____

I, (Signature) _____, hereby certify that I have completed (or will complete) all the courses listed on the Program Sheet. I have read and understand the policies listed on the last page of this program sheet. I further certify that the grade listed for those courses is the final course grade received except for the courses in which I am currently enrolled and the courses which I complete next semester. I have indicated the semester in which I will complete these courses.

Signature of Advisor _____ Date _____ 20__

Signature of Department Head _____ Date _____ 20__

Signature of Registrar _____ Date _____ 20__

DEGREE REQUIREMENTS:

- Minimum of 60 semester hours total (A minimum of 15 of the final 30 semester hours of credit at CMU).
- 2.00 cumulative GPA or higher in all CMU coursework and a grade of "C" or better must be earned toward the major content area
- A grade of "C" or higher must be earned in all Essential Learning courses in order to be accepted for transfer under the Core Transfer Agreements.
- Pre-collegiate courses (usually numbered below 100) cannot be used for graduation.
- A student must follow the CMU graduation requirements either from 1) the program sheet for the major in effect at the time the student officially declares a major; or 2) a program sheet for the major approved for a year subsequent to the year during which the student officially declares the major and is approved for the student by the department head. Because a program may have requirements specific to the degree, the student should check with the faculty advisor for additional criteria. It is the student's responsibility to be aware of, and follow, all requirements for the degree being pursued. Any exceptions or substitutions must be approved by the student's faculty advisor and Department Head.
- When filling out the program sheet a course can be used only once.
- See the "Undergraduate Graduation Requirements" in the catalog for additional graduation information.

ESSENTIAL LEARNING REQUIREMENTS (31 semester hours)
 See the current catalog for a list of courses that fulfill the requirements below. If a course is on the Essential Learning list of options and a requirement for your major, you must use it to fulfill the major requirement and make a different selection within the Essential Learning requirement. The Essential Learning capstone course and co-requisite Essential Speech course (required for bachelor's degrees) cannot be used as options for the below requirements.

Course No	Title	Sem.hrs	Grade	Term
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		
Social and Behavioral Sciences (6 semester hours)				
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
Fine Arts (3 semester hours)				
_____	_____	_____	_____	_____
Math MATH 113 or higher (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*		
*3 credits apply to the Essential Learning requirements and 1 credit applies to elective credit				
Humanities (3 semester hours)				
_____	_____	3		
Natural Sciences (7 semester hours, one course must include a lab) CHEM 131/131L, and 132/132L recommended				
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	L _____	_____	_____	_____

Course No	Title	Sem.hrs	Grade	Term
History (3 semester hours)				
HIST _____	_____	3	_____	_____

WELLNESS REQUIRMENT (2 semester hours)				
KINE 100	Health and Wellness	1	_____	_____
KINA 1 _____	_____	1	_____	_____

BIOLOGY EMPHASIS CORE REQUIREMENTS
 (24 semester hours)

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 Lab	1	_____	_____

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

*MATH 113	College Algebra	1	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

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.

_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

SUGGESTED COURSE SEQUENCING FOR THE ASSOCIATE OF SCIENCE WITH A MAJOR IN LIBERAL ARTS - EMPHASIS IN BIOLOGY

This is a recommended sequence of course work. Certain courses may have prerequisites or are only offered during the Fall or Spring semesters. It is the student's responsibility to meet with the assigned advisor and check the 2 year course matrix on the Colorado Mesa website for course availability.

FRESHMAN YEAR

Fall Semester	Hours	Spring Semester	Hours
BIOL 105	Attributes of Living Systems	BIOL 106	Principles of Animal Biology
	3		3
BIOL 105L	Attributes of Living Systems Lab	BIOL 106L	Principles of Animal Biology Lab
	1		1
ENGL 111	English Composition	ENGL 112	English Composition
	3		3
MATH 113	College Algebra (or higher)	ESSL	Humanities
	4		3
ESSL	Fine Arts	ESSL	Social/Behavioral Science
	3		3
KINE 100	Health and Wellness	ESSL	History
	<u>1</u>		<u>3</u>
	15		16

SOPHOMORE YEAR

Fall Semester	Hours	Spring Semester	Hours
BIOL 107	Principles of Plant Biology	Biology Specialization Selection	3
	3		3
BIOL 107L	Principles of Plant Biology Lab	ESSL	Natural Science with lab
	1		4
BIOL 208	Fundamentals of Ecology & Evolution	ESSL	Social/Behavioral Science
	3		3
BIOL 208L	Fundamentals of Ecology & Evolution Lab	KINA Activity	1
	1		1
Biology Specialization Selection	4	Electives	<u>3</u>
ESSL	Natural Science		14
	<u>3</u>		
	15		

POLICIES:

1. Please see the catalog for a complete list of graduation requirements.
2. This program sheet must be submitted with your graduation planning sheet to your advisor during the **semester prior to the semester of graduation, no later than October 1 for spring graduates, no later than March 1 for fall graduates.** You must turn in your "Intent to Graduate" form to the Registrar's Office **by September 15 if you plan to graduate the following May, and by February 15 if you plan to graduate the following December.**
3. Your advisor will sign and forward the Program Sheet and Graduation Planning Sheet to the Department Head for signature. Finally, the Department Head will submit the signed forms to the Registrar's Office. (Students cannot handle the forms once the advisor signs.)
4. If your petition for graduation is denied, it will be your responsibility to reapply for graduation in a subsequent semester. Your "Intent to Graduate" does not automatically move to a later graduation date.
5. NOTE: The semester before graduation, you may be required to take a capstone exit assessment/project.