2014-2015 PETITION/PROGRAM SHEET
Degree: Associate of Science
Major: Liberal Arts
Emphasis: Mathematics

About This Emphasis . . .

The Associate of Science (A.S.) degree with an emphasis in mathematics provides students with a reasonable exposure to foundational college-level mathematics. The A.S. is the appropriate choice for students who will take upper division coursework in mathematics, biological sciences, and physical sciences. The degree program includes the Colorado Statewide General Education Core and meets the lower division general education requirements at most public institutions in Colorado. By completing this degree, students should be able to matriculate into a baccalaureate degree in mathematics with only 60 additional hours of coursework.

For more information on what you can do with this major, go to http://www.coloradomesa.edu/career/whatmajor.html and/or http://www.coloradomesa.edu/mathstat/links.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. Construct multi-step problem-solving strategies, and communicate solutions effectively in written form. (Specialized Knowledge/ Quantitative Fluency)
2. Use mathematical software (including calculators) to aid in problem-solving and investigation, and understand its limitations.(Applied Learning)

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.

_____   _____20_____
Signature of Advisor   Date

_____   _____20_____
Signature of Department Head   Date

_____   _____20_____
Signature of Registrar   Date

Students should work closely with a faculty advisor when selecting and scheduling courses prior to registration.

Degree Requirements:
- 60 semester hours total (A minimum of 16 taken at CMU in no fewer than two semesters)
- Pre-collegiate courses (usually numbered below 100) cannot be used for graduation.
- 2.50 cumulative GPA or higher in all CMU coursework
- No more than one "D" may be used in the Mathematics area of emphasis and a grade point average of 2.5 or higher must be maintained for all coursework toward the major content area.
- A grade of "C" or higher must be earned in all general education courses in order to be accepted for the transfer under the Core Transfer Agreements.
- 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.

GENERAL EDUCATION REQUIREMENTS (31 semester hours)
See the current catalog for a list of courses that fulfill the requirements below. If a course is on the general education list of options and a requirement for your major, <u>you must use it to fulfill the major requirement</u> and make a different selection within the general education requirement.

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	_____	_____

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

MATH 119	Precalculus Mathematics			
OR		5*	_____	_____
MATH 151	Calculus I			

*3 credits apply to the General Ed requirements and 2 credits apply to elective credit

Social and Behavioral Sciences (6 semester hours)

_____ ____ _____ ____ _____ _____
_____ ____ _____ ____ _____ _____

Course No Title	Sem.hrs	Grade	Term

Humanities (3 semester hours)

_____ ____ _____ ____ _____ _____

Natural Sciences (7 semester hours, one course must include a lab)

_____ ____ _____ ____ _____ _____
_____ ____ _____ ____ _____ _____
_____ ___L _____ ____ _____ _____

History (3 semester hours)
HIST ____ _____ ____ _____ _____

Fine Arts (3 semester hours)

_____ ____ _____ ____ _____ _____

OTHER LOWER DIVISION REQUIRMENTS (5 semester hours)

Kinesiology (2 semester hours)

KINE 100	Health and Wellness	1	_____	_____
KINA 1____	_____	1	_____	_____

Applied Studies (3 semester hours)

_____ ____ _____ ____ _____ _____

MATHEMATICS EMPHASIS REQUIREMENTS
(15-21 semester hours)

Core Classes

MATH 151*	Calculus I	5	_____	_____
MATH 152	Calculus II	5	_____	_____
MATH 253	Calculus III	4	_____	_____
MATH 260	Differential Equations			
	OR	3 or 4	_____	_____
MATH 236	Differential Equations and Linear Algebra			
STAT 200	Probability and Statistics	3	_____	_____

*If MATH 151 is used to satisfy the Mathematics General Education Requirement, only 15 semester hours are required for the emphasis.

Electives (3-9 Semester Hours) Any college level undergraduate courses. Recommended: MATH 240 Introduction to Advanced Mathematics or CSCI 111 Computer Science 1-Foundations.

*MATH 119	Precalculus Mathematics			
OR		2	_____	_____
*MATH 151	Calculus I			

_____ ____ _____ ____ _____ _____
_____ ____ _____ ____ _____ _____
_____ ____ _____ ____ _____ _____

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

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
ENGL 111	English Composition	3
MATH 151	Calculus I	5
General Education Natural Science with Lab		4
General Education Social/Behavioral Science		3
		15

Spring Semester		Hours
ENGL 112	English Composition	3
MATH 152	Calculus II	5
General Education Natural Science		3
STAT 200	Probability and Statistics	3
KINA	Activity	1
		15

SOPHOMORE YEAR

Fall Semester		Hours
MATH 253	Calculus III	4
General Education Humanities		3
CSCI 111 Computer Science I or Elective		3-4
General Education Social/Behavioral Science		3
KINE 100	Health and Wellness	1
		14-15

Spring Semester		Hours
MATH 260	Differential Equations	3
MATH 240	Introduction to Advanced Mathematics or Elec.	3-4
General Education Fine Arts		3
General Education History		3
General Education Applied Studies		3
		15-16

POLICIES:
1. It is your responsibility to determine whether you have met the requirements for your degree. Please see the catalog for a complete list of graduation requirements.
2. 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. 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.**
4. Your advisor will sign and forward the Program Sheet and Graduation Planning Sheet to the Department Head for signature.
5. Finally, the Department Head or the department administrative assistant will take the signed forms to the Registrar's Office. (Students cannot handle the forms once the advisor signs.)
6. 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.
7. NOTE: The semester before graduation, you may be required to take a Major Field Achievement Test (exit exam).