2017-2018 PROGRAM REQUIREMENTS
Degree: Associate of Science
Major: Liberal Arts
Emphasis: Mathematics

About This Major . . .
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)

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

- 2.5 cumulative GPA or higher in all CMU coursework.
- No more than one "D" may be used in the Mathematics area of emphasis.
- A GPA of 2.5 or higher must be maintained for all coursework 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.)

- ☐ One of the following courses:
  MATH 119 - Precalculus Mathematics (5)
  MATH 151 - Calculus I (5)
  *3 credits apply to the Essential Learning Requirements and 2 credits apply to electives.

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)

- ☐ 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: LIBERAL ARTS, MATHEMATICS REQUIREMENTS (15-21 semester hours, no more than one "D" grade may be used.)

- ☐ MATH 151 - Calculus I (5)
  If MATH 151 is used to satisfy the Mathematics Essential Learning Requirement, only 15 semester hours are required for the emphasis.
- ☐ MATH 152 - Calculus II (5)
- ☐ MATH 253 - Calculus III (4)
- ☐ One of the following courses:
  MATH 260 - Differential Equations (3)
  MATH 236 - Differential Equations and Linear Algebra (4)
- ☐ STAT 200 - Probability and Statistics (3)

ELECTIVES (All college level courses not listed above that will bring your total semester hours to 60 hours. 6-12 semester hours.)
Recommended: MATH 240 - Introduction to Advanced Mathematics or CSCI 111 - CS1: Foundations of Computer Science.

- ☐ *MATH 119 - Precalculus Mathematics or MATH 151 - Calculus I (2)
- ☐ _____
- ☐ _____
- ☐ _____
- ☐ _____

SUGGESTED COURSE SEQUENCING

Freshman Year, Fall Semester: 15 credits

- ENGL 111 - English Composition (3)
- MATH 151 - Calculus I (5)
- Essential Learning - Natural Science with lab (4)
- Essential Learning - Social and Behavioral Sciences (3)

Freshman Year, Spring Semester: 15 credits

- ENGL 112 - English Composition (3)
- MATH 152 - Calculus II (5)
- Essential Learning - Natural Science without lab (3)
- STAT 200 - Probability and Statistics (3)
- Wellness Requirement - Activities Course (1)

Sophomore Year, Fall Semester: 14-15 credits

- MATH 253 - Calculus III (4)
- Essential Learning - Humanities (3)
- CSCI 111 - Foundations of Computer Science or Elective (3-4)
- Essential Learning - Social and Behavioral Sciences (3)
- KINE 100 - Health and Wellness (1)

Sophomore Year, Spring Semester: 15-16 credits*

- MATH 260 - Differential Equations (3)
- MATH 240 - Introduction to Advanced Mathematics or Elective (3-4)
- Essential Learning - Fine Arts (3)
- Essential Learning - History (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.