2015-2016 PETITION/PROGRAM SHEET
Degree: Bachelor of Science
Major: Mathematics
Concentration: Statistics

About This Major . . .

The statistics concentration in mathematics prepares students for graduate work in statistics or to enter the job force. With some additional job-specific training, students entering the job market could function as applied statisticians working in areas such as actuarial science, wildlife management, marketing, quality control, and epidemiology to name a few. For more information on what you can do with this major, go to http://www.coloradomesa.edu/career/whatmajor.html.

All CMU baccalaureate 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 and concentration 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)
3. Apply appropriate statistical procedures and justify chosen assumptions. (Applied Learning)
4. Draw statistical conclusions and evaluate the validity of others' conclusions. (Critical Thinking)
5. Communicate technical analyses to non-specialists. (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.

_____ _____ 20____
Signature of Advisor Date

_____ _____ 20____
Signature of Department Head Date

_____ _____ 20____
Signature of Registrar Date

DEGREE REQUIREMENTS:

- 120 semester hours total (Students must complete a minimum of 30 of the last 60 hours of credit at CMU, with at least 15 semester hours in major discipline courses numbered 300 or higher).
- 40 upper division credits (A minimum of 15 taken at the 300-400 course levels within the major at CMU).
- Pre-collegiate courses (usually numbered below 100) cannot be used for graduation.
- 2.00 cumulative GPA or higher in all CMU coursework
- 2.50 cumulative GPA or higher in coursework toward the major content area No more than one "D" may be used in completing major requirements.
- 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 for additional graduation information.
- Essential Learning Capstone should be completed between 45 and 75 hours.
- 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 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.

Course	No	Title	Sem.hrs	Grade	Term/Trns
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 (3 semester hours, must receive a grade of "C" or better, must be completed by the time the student has 60 semester hours.)					
MATH	151	Calculus I	5*		
*3 credits apply to the Essential Learning requirements and 2 credits apply to Foundation Courses					
Humanities (3 semester hours)					
Social and Behavioral Sciences (6 semester hours)					
Natural Sciences (7 semester hours, one course must include a lab)					
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Course	No	Title	Sem.hrs	Grade	Term/Trns
History (3 semester hours)					
HIST					
Fine Arts (3 semester hours)					
WELLNESS REQUIREMENT (2 semester hours)					
KINE	100	Health and Wellness	1		
KINA	1		1		
ESSENTIAL LEARNING CAPSTONE (4 semester hours)					
ESSL	290	Maverick Milestone (see English & math pre-reqs)	3		
ESSL	200	Essential Speech (co-requisite)	1		
Foundation Courses (10 Semester Hours)					
MATH	151	Calculus I	2		
MATH	152	Calculus II	5		
STAT	200	Probability and Statistics	3		

MATHEMATICS – STATISTICS MAJOR REQUIREMENTS
(41 semester hours) A 2.5 GPA is required in the major courses. No more than one "D" may be used in completing major requirements.

Core Classes					
CSCI	111	CS1: Foundations of Computer Science I	4		
MATH	240	Intro to Advanced Mathematics	4		
MATH	253	Calculus III	4		
MATH	325	Linear Algebra I	3		
MATH	394	Mathematics Colloquium	1		
MATH	452	Introduction to Real Analysis I			
OR			3		
MATH	460	Linear Algebra II			
MATH	484	Senior Seminar I	2		
MATH	494	Senior Seminar II	2		
STAT	311	Statistical Methods	3		
STAT	313	Sampling Techniques	3		
STAT	350	Mathematical Statistics I	3		
STAT	351	Mathematical Statistics II	3		
STAT	412	Correlation and Regression	3		
STAT	425	Design & Analysis of Experiments	3		

Electives (All college level courses appearing on your final transcript, **not listed above** that will bring your total semester hours to 120 hours.) (32 total semester hours; some upper division hours may be needed.)

SUGGESTED COURSE SEQUENCING FOR THE CONCENTRATION IN STATISTICS

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
MATH 151	Calculus I	5	MATH 152	Calculus II	5
CSCI 111	CS1: Foundations of Computer Science	4	ENGL 112	English Composition	3
ENGL 111	English Composition	3	Essential Learning	Social/Behavioral Science	3
Essential Learning	Social/Behavioral Science	3	Essential Learning	History	3
KINE 100	Health and Wellness	1	KINA	Activity	1
		16			15

SOPHOMORE YEAR

Fall Semester		Hours	Spring Semester		Hours
MATH 240	Introduction to Advanced Mathematics	4	MATH 253	Calculus III	4
Essential Learning	Humanities	3	Essential Learning	Natural Science with Lab	4
Essential Learning	Fine Arts	3	ESSL 200	Essential Speech	1
STAT 200	Probability and Statistics	3	ESSL 290	Maverick Milestone	3
Essential Learning	Natural Science	3	Elective		3
		16			15

JUNIOR YEAR

Fall Semester		Hours	Spring Semester		Hours
MATH 325	Linear Algebra I	3	STAT 313	Sampling Techniques	3
STAT 311	Statistical Methods	3	STAT 351	Mathematical Statistics II	3
STAT 350	Mathematical Statistics I	3	Upper Division Elective		3
Elective		3	MATH 394	Mathematics Colloquium	1
Upper Division Elective		3	Elective		3
		15	Elective		3
					16

SENIOR YEAR

Fall Semester		Hours	Spring Semester		Hours
MATH 452	Intro to Real Analysis I **OR**		STAT 425	Design & Analysis of Experiments **OR**	
MATH 460	Linear Algebra II	3	STAT 496	Topics	3
STAT 412	Correlation and Regression	3	MATH 494	Senior Seminar II	2
MATH 484	Senior Seminar I	2	Upper Division Elective		2
Upper Division Elective		3	Elective		3
Elective		3	Elective		3
		14			13

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: During your senior year, you will be required to take a capstone exit assessment/project (e.g,, Major Field Achievement Test)