2011-2012 PETITION/PROGRAM SHEET

Degree: Bachelor of Science Major: Mathematics Concentration: Statistics

About This Major . . .

With a major in mathematics with a concentration in statistics, students develop problem-solving, logical and critical thinking skills. While completing the required coursework, students gain an understanding of the nature of proof, a general understanding of mathematics and an understanding of statistical reasoning, necessary assumptions and the correct use of statistical analysis procedures. Math/statistics majors also develop statistical software skills and oral and written mathematical communication skills.

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.

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 will be required to take a Major Field Achievement Test (exit exam).

NAME:	STUDENT ID #	
LOCAL ADDRESS AND PHONE NUMBER:		
	()	
I, (Signature) on the Program Sheet. I further certify that t	, hereby certify that I have completed (or will grade listed for those courses is the final course grade received exceptee next semester. I have indicated the semester in which I will comp	ot for the courses in which I am
Signature of Advisor		20
Signature of Department Head	Date	20
Signature of Registrar		20

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

Degree Requirements:

- 120 semester hours total (A minimum of 28 taken at CMU in no fewer than two semesters).
- 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.

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, you must use it to fulfill the major requirement and make a different selection within the general education 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

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

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MATH 151 Calculus I 5* ____

*3 credits apply to the General Ed requirements and 2 credits apply to Foundation Courses

Humanities (3 semester hours)

ENGL 112 English Composition

Vatura	Sciences (7 se	emester hour	s, one cours	e must	include	a lab)
	L					
History	(3 semester ho	ours)				

Course No 7	Title	Sem.hrs	Grade Term/Trns
OTHER LO	WER DIVISION REQUIRED	MENTS ((6 semester hours)
Kinesiology	(3 semester hours)		
Students mus	t take KINE 100, plus two 100-	level KIN	NA or approved
DANC course			
	Health and Wellness	1	
KINA 1		_ 1	
KINA 1		_ 1	
Applied Stud	dies (3 semester hours)		
Foundation (Courses (10 Semester Hours)		
<u>Foundation (</u> MATH 151	Calculus I	2	
MATH 151	Calculus II	5 _	
STAT 200	Probability and Statistics	3 -	
	TICS – STATISTICS MAJO	-	IDEMENTS
	hours) A 2.5 GPA is required in		
	e "D" may be used in completing		
Core Classes	-	gjor .	
	_		
CSCI 111	CS1: Foundations of Comput		
N	Science I	4	
MATH 240	Intro to Advanced Mathemati		
MATH 253	Calculus III	4	
MATH 325	Linear Algebra I	3	
STAT 351	Mathematical Statistics II	3	
STAT 311	Statistical Methods	3	
STAT 313	Sampling Techniques	3	
STAT 350	Mathematical Statistics I	3	
MATH 394	Mathematics Colloquium	1	
MATH 484	Senior Seminar I	2 2	
MATH 494	Senior Seminar II		
STAT 412 MATH 452	Correlation and Regression	3	
OR	Introduction to Real Analysis	3	
<u>OK</u> MATH 460	Linear Algebra II	3	
STAT 425		riments	
31A1 423	Design and Analysis of Exper	3	
		J	
Electives (Al	l college level courses appearin	g on voii	r final transcript
	ove that will bring your total se		
	ester hours; some upper division		
			<u> </u>

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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:		ENGL 112 English Composition	3
Foundations of Computer Science		4	General Education Social/Behavioral Science	3
ENGL 111	English Composition	3	General Education History	3
General Education Social/Behavioral Science		3	KINA Activity	<u>1</u>
KINE 100	Health and Wellness	<u>1</u>		15
		16		

SOPHOMORE YEAR

Fall Semester		Hours	Spring Semester		Hours
MATH 240	Introduction to Advanced Mathematic	es 4	MATH 253	Calculus III	4
General Education Humanities		3	STAT 200	Probability and Statistics	3
General Education Fine Arts		3	General Education Natural Science with Lab		4
General Education Applied Studies		3	Elective		<u>3</u>
General Educat	tion Natural Science	_3			$1\overline{4}$
		16			

JUNIOR YEAR

Fall Semester		Hours	Spring Semes	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		<u>3</u>	Elective	_	3
		15	Elective		<u>3</u>
					16

SENIOR YEAR

Fall Semester		Hours	Spring Semest	ter	Hours
MATH 452	Intro to Real Analysis I or		STAT 425	Design & Analysis of Experiments of	<u>r</u>
	-		STAT 496	Topics	3
Math 460	Linear Algebra II	3	MATH 494	Senior Seminar II	2
STAT 412	Correlation and Regression	3	KINA	Activity	1
Math 484	Senior Seminar I	2	Elective	-	3
Upper Division	Elective	3	Elective		3
Upper Division	Elective	2			12
Elective		<u>3</u>			
		16			

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