2007 – 08 PETITION/PROGRAM SHEET
Degree: Bachelor of Science
Major: Mathematics
Concentration: Statistics
www.mesastate.edu/schools/snsm/csms/degrees/stat.htm

About This Major . . .

The role of mathematics and statistics in a liberal arts education is to provide quantitative and analytical reasoning skills, which aid students in the organization of data and problem solving. More specifically, the concentration in statistics provides students with the ability to utilize a large array of statistical analysis procedures, to develop an understanding of necessary assumptions and the correct use of statistical procedures, to develop skills in the use of statistical software, and necessary communication skill, especially when interacting with other professionals.

The statistics concentration in mathematics prepares students for graduate work in statistics or to develop the student's statistical and mathematical skills to enter the job force. Students entering the job market with some additional job-specific training could function as applied statisticians working in areas such as actuarial science, wildlife management, marketing, quality control, and epidemiology to name a few.

The program gives students individual attention. Most lower division and all of our upper division classes are small compared to larger institutions.

POLICIES:
1. It is your responsibility to determine whether you have met the requirements for your degree. Please see the MSC 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)_____, hereby certify that I have completed (or will complete) all the courses listed on the 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:
- Must earn 120 semester hours total and meet the academic residency requirements to earn a baccalaureate degree at Mesa State College.
- 40 upper division credits (i.e., 300-level and 400-level courses).
- 2.00 cumulative GPA or higher in all MSC 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.
- Excess KINA courses beyond the two required and pre-collegiate courses (usually numbered below 100) cannot be used for graduation.
- Program sheets are for advising purposes only. Because a program may have requirements specific to the degree, check with your advisor for additional guidelines, including prerequisites, grade point averages, grades, exit examinations, and other expectations. It is the student's responsibility to be aware of, and follow, all guidelines for the degree being pursued. Any exceptions or substitutions must be approved by the faculty advisor and/or Department Head. Courses related to teacher licensure must also be approved by the Teacher Education Dept.
- When filling out the program sheet a course can be used only once.
- See the "Undergraduate Graduation Requirements" in the Mesa State College catalog for additional graduation information.

GENERAL EDUCATION REQUIREMENTS (31 Semester Hours)
See the current Mesa State College 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.)

Course No	Title	Sem.hrs	Grade	Term/Trns
ENGL 111	English Composition	3	_____	_____
ENGL 112	English Composition	3	_____	_____

(ENGL 129, Honors English, may be substituted for ENGL 111 & ENGL 112.)

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

Course No	Title	Sem.hrs	Grade	Term/Trns
MATH 151	Calculus I	5*	_____	_____

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

Humanities (3 semester hours)
_____ ____ _____ ____ _____ _____

Social and Behavioral Sciences (6 semester hours)
_____ ____ _____ ____ _____ _____
_____ ____ _____ ____ _____ _____

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

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

Fine Arts (3 semester hours)
_____ ____ _____ ____ _____ _____
_____ ____ _____ ____ _____ _____

Course No	Title	Sem.hrs	Grade	Term/Trns

OTHER LOWER DIVISION REQUIREMENTS

Kinesiology (3 semester hours)
Students must take KINE 100, plus two 100-level KINA/HPWE or approved DANC course.

Course No	Title	Sem.hrs	Grade	Term/Trns
KINE 100	Health and Wellness	1	_____	_____
KINA 1____	_____	1	_____	_____
KINA 1____	_____	1	_____	_____

Applied Studies (3 semester hours)
_____ ____ _____ ____ _____ _____

BACHELOR OF SCIENCE DEGREE DISTINCTION REQUIREMENTS (6 semester hours) Must receive a grade of "C" or better.

Course No	Title	Sem.hrs	Grade	Term/Trns
STAT 200	Probability and Statistics	3	_____	_____

Humanities or Social/Behavioral Sciences: (3 semester hours)
_____ ____ _____ ____ _____ _____

MATHEMATICS – STATISTICS MAJOR REQUIREMENTS
(44 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

Course No	Title	Sem.hrs	Grade	Term/Trns
CSCI 111	Computer Science	4	_____	_____
MATH 152	Calculus II	5	_____	_____
MATH 240	Intro to Advanced Mathematics	3	_____	_____
MATH 253	Calculus III	4	_____	_____
MATH 361	Numerical Analysis	4	_____	_____
STAT 351	Mathematical Statistics II	3	_____	_____
STAT 311	Statistical Methods	3	_____	_____
STAT 313	Sampling Techniques	3	_____	_____
STAT 350	Mathematical Statistics I	3	_____	_____
STAT 412	Correlation and Regression	3	_____	_____
MATH 452 **OR** MATH 490	Introduction to Real Analysis I / Abstract Algebra I	3	_____	_____
MATH 453 **OR** MATH 491	Introduction to Real Analysis II / Abstract Algebra II	3	_____	_____
STAT 425 **OR** STAT 496	Design and Analysis of Experiments / STAT 496 Topics	3	_____	_____

Electives (All college level courses appearing on your final transcript, **not listed above** that will bring your total semester hours to 120 hours. Excludes KINA activity courses.) (30 semester hours; some upper division hours may be needed.)

Course No	Title	Sem.hrs	Grade	Term/Trns
*MATH 151	Calculus	2	_____	_____
_____	_____	____	_____	_____
_____	_____	____	_____	_____
_____	_____	____	_____	_____
_____	_____	____	_____	_____
_____	_____	____	_____	_____
_____	_____	____	_____	_____
_____	_____	____	_____	_____
_____	_____	____	_____	_____
_____	_____	____	_____	_____
_____	_____	____	_____	_____
_____	_____	____	_____	_____
_____	_____	____	_____	_____

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 their advisor and check the 2 year course matrix on the Mesa State website for course availability.

FRESHMAN YEAR

Fall Semester		Hours
MATH 151	Calculus I	5
CSCI 110	Beginning Programming **or**	
CSCI 111	Computer Science I (recommended)	3-4
ENGL 111	English Composition	3
General Education Social/Behavioral Science		3
KINE 100	Health and Wellness	1
		15-16

Spring Semester		Hours
MATH 152	Calculus II	5
ENGL 112	English Composition	3
General Education Social/Behavioral Science		3
General Education History		3
KINE	Activities (2 courses)	2
		16

SOPHOMORE YEAR

Fall Semester		Hours
MATH 240	Introduction to Advanced Mathematics	3
General Education Humanities		3
General Education Fine Arts		3
General Education Applied Studies		3
General Education Natural Science		3
		15

Spring Semester		Hours
MATH 253	Calculus III	4
STAT 200	Probability and Statistics	3
General Education Natural Science with Lab		3-4
General Education Social/Behavioral Science or Humanities		3
		13-14

JUNIOR YEAR

Fall Semester		Hours
MATH 361	Numerical Analysis	4
STAT 311	Statistical Methods	3
STAT 350	Mathematical Statistics I	3
Upper Division Elective		3
Degree Distinction		3
		16

Spring Semester		Hours
STAT 313	Sampling Techniques	3
STAT 351	Mathematical Statistics II	3
Upper Division Elective		3
Elective		3
Elective		3
		15

SENIOR YEAR

Fall Semester		Hours
MATH 452	Intro to Real Analysis I **or**	
MATH 490	Abstract Algebra	3
STAT 412	Correlation and Regression	3
Upper Division Elective		3
Upper Division Elective		3
Upper Division Elective		3
		15

Spring Semester		Hours
MATH 453	Intro to Real Analysis II **or**	
MATH 491	Abstract Algebra II	3
STAT 425	Design & Analysis of Experiments **or**	
STAT 496	Topics	3
Elective		3
Elective		3
Elective		3
		15