2006 – 07 PETITION/PROGRAM SHEET
Degree: Bachelor of Science
Major: Mathematics
www.mesastate.edu/schools/snsm/csms

About This Major . . .

The mathematics major will help you to develop problem-solving, logical and critical thinking skills. With this degree you will gain an understanding of the nature of proof, a broad general understanding of mathematics, and a deep understanding of at least one area of mathematics.

Mathematics majors get jobs in a wide variety of areas. Our graduates have worked for local businesses, have run their own businesses, and have worked for scientific companies; others have attended graduate schools such as CU and CSU, and even law school, medical school, and veterinary school. Potential employers believe that if a student is successful in our program, then the student has general problem solving skills that can be altered and adapted to changing situations.

Our students receive individual attention that they might lack at a large research institution. We have high expectations for the quality of their work and support them in their endeavors by providing an ongoing program of careful mentoring. As our society becomes more technologically dependent, it is critical for individual students and for society as a whole to be mathematically competent.

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

- Must earn 120 semester hours and meet the academic residency requirements to earn a baccalaureate degree at Mesa State College.
- Must earn a minimum of 40 semester hours in upper division courses (i.e., 300-level and 400-level courses).
- A cumulative grade point average of 2.0 or higher must be maintained for all courses and a 2.5 GPA is required in the major courses.
- When filling out this program sheet a course can only be used once, i.e., no double counting is allowed between categories.
- Excess KINA/HPWE courses beyond the two required and pre-collegiate courses (usually numbered below 100) cannot be used for graduation.
- All degree requirements must be completed as described. Any exceptions or substitutions must be recommended in advance by the faculty advisor and approved by the Department Head.
- Meet with your faculty advisor regularly beginning in your freshman year to ensure you are making satisfactory progress towards your degree.
- It is recommended that students work closely with a faculty advisor when selecting courses and scheduling classes prior to registration.
- Students are required to participate in exit examinations or other programs deemed necessary to comply with the college accountability requirement.

General Education Requirements (Minimum of 33 semester hours) See the M.S.C. catalog for the list of courses that meet the general education categories.

Course	No.	Credit	Grade	Term	Year	Trns/Subs
English: ENGL 111 **and** 112 (6 semester hours, must receive a "C" or higher, must be completed by the time the student has 60 semester hours)						
*ENGL						
*ENGL						

*ENGL 129, Honors English, may be substituted for ENGL 111 and ENGL 112. Must earn a grade of "C" or better. May need to take additional electives.

Course	No.	Credit	Grade	Term	Year	Trns/Subs
Humanities: (6 semester hours)						
Social and Behavioral Sciences: (6 semester hours)						

Course	No.	Credit	Grade	Term	Year	Trns/Subs
Humanities or Social/Behavioral Science: (3 semester hours)						
Fine Arts: (3 semester hours)						
Natural Sciences: (minimum 6 semester hours, at least one course must include a lab)						
Applied Studies: (3 semester hours)						

Other Requirements (10 semester hours) See the M.S.C. catalog for the list of approved KINA/HPWE Activity courses.

Kinesiology: (3 Semester Hours)

Course	No.	Credit	Grade	Term	Year	Trns/Subs
KINE/HPWA	100	1				
KINA/HPWE		1				
KINA/HPWE		1				

See the M.S.C. catalog for the list of approved KINA/HPWE/Selected DANC courses.

Bachelor of Science Degree Distinction:

(7 semester hours) Must earn a "C" or better in both courses.

Course	No.	Credit	Grade	Term	Year	Trns/Subs
CSCI	111	4				
STAT	200	3				

Mathematics Major Requirements (45-47 Semester Hours) A 2.5 GPA is required in the major courses. At most one "D" may be used in completing major requirements.

Course	No.	Credit	Grade	Term	Year	Trns/Subs	Course	No.	Credit	Grade	Term	Year	Trns/Subs
MATH	151	5					MATH	490	3				
MATH	152	5					MATH	453	3				
MATH	240	3					**or**						
MATH	253	4					MATH	491	3				
MATH	325	3					MATH	484	2				
MATH	452	3					MATH	494	2				

Four courses from: MATH 260, MATH 310, MATH 360, MATH 361, MATH 365, MATH 369, MATH 370, MATH 386, MATH 420, MATH 430, MATH 450, MATH 460, MATH 453 **or** MATH 491, STAT 311, MATH 396 **or** MATH 496 (At most one topics course, which must be 3 semester hours, can be used as one of these four courses.)

Course	No.	Credit	Grade	Term	Year	Trns/Subs	Course	No.	Credit	Grade	Term	Year	Trns/Subs
MATH							MATH						
MATH													

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/HPWE activity courses.) (32 semester hours may be needed as well as some additional upper division hours.)

Course	No.	Credit	Grade	Term	Year	Trns/Subs	Course	No.	Credit	Grade	Term	Year	Trns/Subs

GRADUATION INFORMATION

See the "Undergraduate Graduation Requirements" in the Mesa State College catalog for additional graduation information.

GENERAL EDUCATION REQUIREMENTS (Minimum of 33 Semester Hours) See current Mesa State College catalog for list of courses that fulfill the requirements below. If one (or more) of the selections below is required in your major, you must use it to fulfill the major requirement and **make a different selection to meet the general education requirement. The courses may not be used to fulfill both requirements.**

English – 6 Semester Hours (Must be **completed** before student has 60 semester hours. Must receive grade of "C" or better.)
ENGL 111 **and** ENGL 112 **or** ENGL 129 ***(by permission)***

Humanities – 6 semester hours

Social and Behavioral Sciences – 6 semester hours

Humanities or Social/Behavioral Sciences – 3 semester hours

Fine Arts – 3 semester hours

Natural Sciences – 6 semester hours (At least one course must include a lab.)

Applied Studies – 3 semester hours

OTHER REQUIREMENTS (9 Semester Hours)

Kinesiology – 3 Semester Hours
Each student must take KINE/HPWA 100 together with two KINA/HPWE/Selected DANC courses. See current catalog for listing.

Degree Distinction – 7 Semester Hours
CSCI 111 Computer Science I – 4 semester hours
STAT 200 Probability and Statistics – 3 semester hours

Mathematics (45-47 Semester Hours) A 2.5 GPA is required in the major courses. At most one "D" may be used in completing major requirements.

Required Courses:

MATH 151 Calculus I (5)
MATH 152 Calculus II (5)
MATH 240 Introduction to Advanced Mathematics (3)
MATH 253 Calculus III (4)
MATH 325 Linear Algebra (3)
MATH 452 Introduction to Real Analysis I (3)
MATH 490 Abstract Algebra I (3)
MATH 453 Introduction to Real Analysis II (3) **or** MATH 491 Abstract Algebra II (3)
MATH 484 Senior Seminar I (2)
MATH 494 Senior Seminar II (2)
Four Courses from the following:
MATH 260 Differential Equations (3)
MATH 310 Number Theory (3)
MATH 360 Methods of Applied Mathematics (3)
MATH 361 Numerical Analysis (4)
MATH 365 Mathematical Modeling (3)
MATH 369 Discrete Structures I (3)
MATH 370 Discrete Structures II (3)
MATH 386 Geometries (4)
MATH 420 Introduction to Topology (3)
MATH 430 Mathematical Logic (3)
MATH 450 Complex Variables (3)
MATH 460 Linear Algebra II (3)
MATH 453 Introduction to Real Analysis II (3) or MATH 491 Abstract Algebra II (3)
STAT 311 Statistical Methods (3)
MATH 396 Topics (1-3) **or** MATH 496 Topics (1-3)
(At most one topics class, which must be 3 semester hours, can be used as one of these four courses)

General Electives: 32 Semester Hours may be needed as well as additional upper division hours.

Students are required to participate in exit examinations or other programs deemed necessary to comply with the college accountability requirement. All degree requirements must be completed as described above. Any exceptions or substitutions must be recommended in advance by the faculty advisor and approved by the Department Head.

SUGGESTED COURSE SEQUENCING FOR A MAJOR 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 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
ENGL 111	English Composition	3
KINA/HPWE	Activities (2 courses)	2
General Education	Natural Science	3
General Education	Social/Behavioral Science	3
		16

Spring Semester		Hours
MATH 152	Calculus II	5
ENGL 112	English Composition	3
CSCI 111	Computer Science I	4
KINE/HPWA 100	Health and Wellness	1
General Education	Social/Behavioral Science	3
		16

SOPHOMORE YEAR

Fall Semester		Hours
MATH 240	Introduction to Advanced Mathematics	3
MATH 253	Calculus III	4
General Education	Fine Arts	3
General Education	Humanities	3
General Education	Social/Behavioral Science or Humanities	3
		16

Spring Semester		Hours
MATH 325	Linear Algebra	3
STAT 200	Probability and Statistics	3
General Education	Natural Science with Lab	3-4
General Education	Applied Studies	3
General Education	Humanities	3
		15-16

JUNIOR YEAR

Fall Semester		Hours
MATH 490	Abstract Algebra I **or**	
MATH 452	Intro to Real Analysis I	3
Upper Division	Math Choice	3
Upper Division	Elective	3
Electives		6
		15

Spring Semester		Hours
MATH 491	Abstract Algebra II **or**	
MATH 453	Intro to Real Analysis II	3
Upper Division	Math Choice	3
Upper Division	Electives	6-7
		12-13

SENIOR YEAR

Fall Semester		Hours
MATH 452	Intro to Real Analysis I **or**	
MATH 490	Abstract Algebra I	3
Upper Division	Math Choice	3
Elective		3
Upper Division	Elective	3
MATH 484	Senior Seminar I	2
		14

Spring Semester		Hours
MATH 494	Senior Seminar II	2
Upper Division	Math Choice	3
Upper Division	Electives	6
Elective		4
		15