2009-2010 PETITION/PROGRAM SHEET
Degree: Bachelor of Science
Major: Mathematics
Concentration: Secondary Teaching
www.mesastate.edu/academics/programs.html

About This Major . . .

The Mathematics major with a concentration in secondary education helps students develop problem-solving and critical thinking skills while introducing students to the logical and historical development of mathematical ideas. Students also learn the professional skills in teaching methods and content necessary for secondary mathematics teachers.

Graduates from this program are in great demand both locally and statewide with the scarcity of mathematics teachers in this country. Nationally recommended curriculum guidelines are followed in order to ensure that graduates have the mathematical content and conceptual understanding necessary for all high school mathematics courses.

A minimum of 75 credit hours of general education and content area coursework must be completed with a minimum GPA of 2.80 before a candidate may apply for admission to the Center for Teacher Education secondary licensure program. Please see the Teacher Education Admission Packet for further information on admissions criteria. EDUC 211, *Foundations of Education,* must be taken before applying to the program.

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 Content 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:

- 120 semester hours total (A minimum of 28 taken at MSC)
- 40 upper division credits (A minimum of 15 taken within the major at MSC)
- 2.80 cumulative GPA or higher in all MSC coursework
- 2.80 cumulative GPA or higher in coursework toward the major content area
- A cumulative grade point average of 2.8 or higher must be maintained for each of 3 areas: content courses, education courses and overall GPA.
- Pre-collegiate courses (usually numbered below 100) cannot be used for graduation.
- When filling out the program sheet a course can be used only once.
- A student must follow the MSC 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.
- Students are required to participate in exit examinations or other programs deemed necessary to comply with the college accountability requirement.
- Students must PASS the PLACE or PRAXIS II exam in the content area prior to beginning the internship. Also, ALL other coursework toward the degree must be successfully completed prior to the internship.
- 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 "**B**" 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 119 Pre-calculus Mathematics 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)
*PSYC 233 Human Growth & Development 3 _____ _____
_____ ____ _____ ____ _____ _____
*PSYC 233 required with a grade of "**B**" or better

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

Course No Title Sem.hrs Grade Term/Trns

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

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

OTHER LOWER DIVISION REQUIREMENTS (6 semester hours)

Kinesiology (3 semester hours)
KINE 100 Health and Wellness 1 _____ _____
KINA 1____ _____ 1 _____ _____
KINA 1____ _____ 1 _____ _____

Applied Studies (3 semester hours)
SPCH 102 Speechmaking 3 _____ _____
(SPCH 102 Required with a grade of "**B**" or better)

BACHELOR OF SCIENCE DEGREE DISTINCTION REQUIREMENTS (6 semester hours) Must receive a grade of "C" or better.
STAT 200 Probability and Statistics 3 _____ _____

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

MATHEMATICS – LEADING TO SECONDARY TEACHER LICENSURE MAJOR REQUIREMENTS
(44 semester hours) Must pass all courses with a grade of "C" or higher. At most one "D" may be used in completing the major requirements.

MATH 151 Calculus I 5 _____ _____
MATH 152 Calculus II 5 _____ _____
MATH 240 Intro to Advanced Mathematics 4 _____ _____
MATH 253 Calculus III 4 _____ _____
MATH 325 Linear Algebra 3 _____ _____
MATH 369 Discrete Structures 3 _____ _____
MATH 380 History of Mathematics 3 _____ _____
MATH 386 Geometries 4 _____ _____
MATH 352 Advanced Calculus 3 _____ _____
MATH 490 Abstract Algebra I 3 _____ _____
*Choose either MATH 310, MATH 365, **or** STAT 311
_____ ____ _____ 3 _____ _____

*Choose one: (CSCI 111) **or** (CSCI 110/110L) 4
CSCI ____ _____ ____ _____ _____
CSCI ____ _____ ____ _____ _____

Electives (4 semester hours) (All college level courses appearing on your final transcript, **not listed above** that will bring your total semester hours to 120 hours.) MATH 340 is an option for students.
*MATH 119 Pre-calculus Mathematics 2 _____ _____
_____ ____ _____ ____ _____ _____
_____ ____ _____ ____ _____ _____
_____ ____ _____ ____ _____ _____

Secondary Education Requirements (29 semester hours)
*__Prerequisites:__ ENGL 111, ENGL 112, SPCH 102, PSYC 233, EDUC 211 (all with a grade of **B** or better), MATH 119 or higher with a declared major in Mathematics– Leading to Secondary Teacher Licensure and formal acceptance to the Teacher Education Program

Course No	Title	Sem.hrs	Grade	Term/Trns		
EDUC 211	Foundations of Education	2	_____	_____	2 semester hours	20 Field Experience Hours
EDUC 342*	Pedagogy & Assessment: Secondary/K-12	3	_____	_____	3 semester hours	20 Field Experience Hours
EDUC 343*	Teaching to Diversity	3	_____	_____	3 semester hours	20 Field Experience Hours
EDUC 442	Integrating Literacy Across the Curriculum	5	_____	_____	5 semester hours	60 Field Experience Hours
EDUC 497	Content Methodology Practicum	3	_____	_____	3 semester hours	80 Field Experience Hours
EDUC 497C	Methods of Teaching Secondary Math	1	_____	_____	1 semester hour	
EDUC 499G	Teaching Internship and Colloquium	12	_____	_____	12 semester hours	600 Field Experience Hours

****All EDUC prefix courses listed above must be completed with a grade of B or better to progress through the program sequence.**

SUGGESTED COURSE SEQUENCING FOR A MAJOR IN MATHEMATICS – LEADING TO SECONDARY TEACHER LICENSURE

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 Mesa State website for course availability.

FRESHMAN YEAR

Fall Semester		Hours
MATH 119	Precalculus Mathematics	5
ENGL 111	English Composition	3
General Education Humanities		3
General Education Fine Arts		3
KINA	Activity (2 courses)	2
		16

Spring Semester		Hours
MATH 151	Calculus I	5
ENGL 112	English Composition	3
General Education Social/Behavioral Science		3
General Education History		3
KINE 100 Health and Wellness		1
		15

SOPHOMORE YEAR

Fall Semester		Hours
MATH 152	Calculus II	5
Elective		2
General Education Natural Science		3
PSYC 233	Human Growth and Development	3
SPCH 102	Speechmaking	3
		16

Spring Semester		Hours
MATH 253	Calculus III	4
MATH 240	Introduction to Advanced Mathematics	4
General Education Social/Behavioral Science or Humanities		3
General Education Natural Science with Lab		4
STAT 200	Probability and Statistics	3
		18

JUNIOR YEAR

Fall Semester		Hours
MATH 325	Linear Algebra I	3
MATH 369	Discrete Structures	3
CSCI 111	Computer Science I **or**	
CSCI 110	Beginning Programming **and**	
CSCI 110L	Beginning Programming Lab	4
#MATH 352	Advanced Calculus	3
**EDUC 211	Foundations of Education	2
		15

**Must be taken prior to acceptance into the Center for Teacher Education. Offered in summer, fall and spring semesters.

Spring Semester		Hours
MATH 380	History of Mathematics	3
MATH 386	Geometries	4
EDUC 342	Pedagogy/Assessment: Secondary/K12	3
EDUC 343	Teaching to Diversity	3
		13

SENIOR YEAR

Fall Semester		Hours
#MATH 490	Abstract Algebra I	3
MATH 310	Number Theory **or**	
*MATH 365	Mathematical Modeling **or**	
STAT 311	Statistical Methods	3
EDUC 442	Integrating Literacy Across the Curriculum	5
EDUC 497	Content Methods Practicum	3
EDUC 497C	Methods of Teaching Secondary Math	1
		15

Note: this course is offered every other year
*Only offered in spring

Spring Semester		Hours
EDUC 499G	Teach. Intern/Colloquium: Secondary	12
		12