2008 – 09 PETITION/PROGRAM SHEET
Degree: Bachelor of Science
Major: Mathematics
Concentration: Secondary Teaching
www.mesastate.edu/schools/snsm/csms/degrees/mathed

About This Major . . .

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

Graduates from this program are in great demand both locally and statewide. Mathematics teachers are becoming increasingly scarce in this country. Nationally recommended curriculum guidelines are followed in order to ensure that graduates have the mathematical content and conceptual understanding necessary to be a good teacher of increasingly difficult high school mathematics courses.

The secondary licensure program provides teacher education candidates a broad field content knowledge and prepares them as teachers for grades 7-12. A minimum of 75 credit hours of general education and mathematics 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. You must be formally accepted into the Teacher Education Program before taking education courses. Please see the Teacher Education Admission Packet for further information on admissions criteria.

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 g.p.a.
- 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.
- 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.
- 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 commencing 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		

(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.)

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)

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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. To continue in the program and eventually graduate as mathematics secondary teaching majors a student must earn, within no more than three attempts, at least a grade of "C" in the major requirements. A 2.8 G.P.A. is required in the major courses. 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

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

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

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

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

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

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