



2006 – 07 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.

Signature of Advisor Date 20__

Signature of Content Advisor Date 20__

Signature of Department Head Date 20__

Signature of Registrar Date 20__

- 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 2.8 or higher must be maintained for each of 3 areas: content courses, education courses and overall g.p.a.
- 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. Courses related to teacher licensure must also be approved by the Teacher Education Dept.
- 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.
- 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.

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
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English: ENGL 111 and 112 (6 semester hours, must receive a "B" or better, 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 "B" or better. May need to take additional electives.

Humanities: (6 semester hours)

Social and Behavioral Sciences: (6 semester hours)

PSYC 233 _____

(PSYC 233 required with a grade of "B" or better)

Course	No.	Credit	Grade	Term	Year	Trns/Subs
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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)

SPCH 102 _____

(SPCH 102 Required with a grade of "B" or better)

Other Requirements (13 semester hours)

Kinesiology: (3 Semester Hours)

Course	No.	Credit	Grade	Term	Year	Trns/Subs
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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:

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

Course	No.	Credit	Grade	Term	Year	Trns/Subs
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MATH 119 5 _____

MATH 151 5 _____

Mathematics – Leading to Secondary Teacher Licensure Major Requirements (41 Semester Hours) A 2.8 g.p.a. is required in the major courses. At most one "D" may be used in completing the major requirements.

Course	No.	Credit	Grade	Term	Year	Trns/Subs
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MATH 152 5 _____

MATH 240 3 _____

MATH 253 4 _____

MATH 325 3 _____

MATH 369 3 _____

MATH 380 3 _____

MATH 386 4 _____

MATH 352 3 _____

Course	No.	Credit	Grade	Term	Year	Trns/Subs
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MATH 490 3 _____

STAT 200 3 _____

*Choose either MATH 310, MATH 365, or STAT 311

_____ 3 _____

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

CSCI _____

CSCI _____

Secondary Education Requirements (29 Semester Hours)

Course	No.	Credit	Grade	Term	Year	Trns/Subs	Course	No.	Credit	Grade	Term	Year	Trns/Subs
*Prerequisites: ENGL 111, ENGL 112, SPCH 102, PSYC 233 (all with a grade of B or better), Declared major in Mathematics– Leading to Secondary Teacher Licensure and formal acceptance to the Teacher Education Program													
EDUC	211*	2	_____	_____	_____	_____	EDUC	497	3	_____	_____	_____	_____
EDUC	342	3	_____	_____	_____	_____	EDUC	497C	1	_____	_____	_____	_____
EDUC	343	3	_____	_____	_____	_____	EDUC	499G	12	_____	_____	_____	_____
EDUC	442	5	_____	_____	_____	_____							

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.)

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.

A 2.8 Minimum Cumulative Grade Point Average is required.

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 “B” or better.)
ENGL 111 **and** ENGL 112 or ENGL 129 (*by permission*)

Humanities – 6 semester hours

Social and Behavioral Sciences – 6 semester hours (PSYC 233 required with a “B” or better)

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 (SPCH 102 required with a “B” or better.)

OTHER REQUIREMENTS (13 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 – 10 Semester Hours

MATH 119 Precalculus Mathematics – 5 semester hours

MATH 151 Calculus I – 5 semester hours

Mathematics – Leading to Secondary Teacher Licensure (41 Semester Hours)

A 2.8 g.p.a. is required in the major courses. At most one “D” may be used in completing the major requirements.

Required Core Courses (40-41 semester hours):

MATH 152 Calculus II
MATH 240 Introduction to Advanced Mathematics
MATH 253 Calculus III
MATH 310 Number Theory **or** MATH 365 Mathematical Modeling **or** STAT 311 Statistical Methods
MATH 325 Linear Algebra
MATH 352 Advanced Calculus
MATH 369 Discrete Structures
MATH 380 History of Mathematics
MATH 386 Geometries
MATH 490 Abstract Algebra I
STAT 200 Probability and Statistics
CSCI 111 Computer Science I **or**
CSCI 110 Beginning Programming **and**
CSCI 110L Beginning Programming Lab

Secondary Education Requirements (29 semester hours)

*EDUC 211 Foundations of Education	2 semester hours	20 Field Experience Hours
EDUC 342 Pedagogy & Assessment: Secondary/K-12	3 semester hours	20 Field Experience Hours
EDUC 343 Teaching to Diversity	3 semester hours	20 Field Experience Hours
EDUC 442 Integrating Literacy Across the Curriculum	5 semester hours	60 Field Experience Hours
EDUC 497 Content Methodology Practicum	3 semester hours	80 Field Experience Hours
EDUC 497C Methods of Teaching Secondary Math	1 semester hour	
EDUC 499G Teaching Internship and Colloquium	12 semester hours	600 Field Experience Hours

*Prerequisites: ENGL 111, ENGL 112, SPCH 102, PSYC 233 (all with grade of B or better) and declared major in Mathematics – Leading to Secondary Teacher Licensure and formal acceptance to the Teacher Education Program

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.)

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 internship.

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, approved by the Department Head and the Teacher Education Department.

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

FRESHMAN YEAR

Fall Semester	Hours	Spring Semester	Hours
MATH 119 Precalculus Mathematics	5	MATH 151 Calculus I	5
ENGL 111 English Composition	3	ENGL 112 English Composition	3
General Education Humanities	3	General Education Social/Behavioral Science	3
General Education Fine Arts	3	General Education Humanities	3
KINA/HPWE Activity (2 courses)	<u>2</u>	KINE/HPWA 100 Health and Wellness	<u>1</u>
	16		15

SOPHOMORE YEAR

Fall Semester	Hours	Spring Semester	Hours
MATH 152 Calculus II	5	MATH 253 Calculus III	4
Elective	3	MATH 240 Introduction to Advanced Mathematics	3
General Education Natural Science	3	General Education Social/Behavioral Science or Humanities	3
PSYC 233 Human Growth and Development	3	General Education Natural Science with Lab	4
SPCH 102 Speechmaking	<u>3</u>	STAT 200 Probability and Statistics	<u>3</u>
	17		17

JUNIOR YEAR

Fall Semester	Hours	Spring Semester	Hours
MATH 325 Linear Algebra I	3	MATH 380 History of Mathematics	3
MATH 369 Discrete Structures	3	MATH 386 Geometries	4
CSCI 111 Computer Science I or		EDUC 211 Foundations of Education	2
CSCI 110 Beginning Programming and		EDUC 342 Pedagogy/Assessment: Secondary/K12	3
CSCI 110L Beginning Programming Lab	4	EDUC 343 Teaching to Diversity	<u>3</u>
#MATH 352 Advanced Calculus	<u>3</u>		15
	13		

SENIOR YEAR

Fall Semester	Hours	Spring Semester	Hours
#MATH 490 Abstract Algebra I	3	EDUC 499G Teach. Intern/Colloquium: Secondary	<u>12</u>
MATH 310 Number Theory or			12
*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	<u>1</u>		
	15		

Note: this course is offered every other year

*Only offered in spring