



**2010-2011 PETITION/PROGRAM SHEET**  
**Degree: Bachelor of Science**  
**Major: Biological Sciences**  
**Concentration: Biology, Secondary Teaching**  
**[www.mesastate.edu/academics/programs.html](http://www.mesastate.edu/academics/programs.html)**

**About This Major . . .**

The Biology program offers coursework, in conjunction with the Center for Teacher Education, leading to licensure in secondary education science. Graduates of the program can teach in the state of Colorado or use their teaching expertise in other careers. After completing foundation sciences classes in Biology, Chemistry, Physics and Geology, students choose 10 hours of upper level Biology course work, in consultation with their advisor.

The secondary licensure program provides teacher education candidates with broad content knowledge in science and prepares them as teachers for grades 7 through 12. 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 your teaching internship, 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 earned 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

\_\_\_\_\_  
Signature of Content Advisor

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature of Department Head

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature of Registrar

\_\_\_\_\_  
Date

**Students should work closely with a faculty advisor when selecting and scheduling courses prior to registration.**

**Degree Requirements:**

- 122 semester hours total (A minimum of 28 taken at MSC in no fewer than two semesters).
- 40 upper division credits (A minimum of 15 taken at the 300-400 course levels 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.
- 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.
- 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.
- 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.

**GENERAL EDUCATION REQUIREMENTS** (37 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
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**English** (6 semester hours, must earn 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:** MATH 113 or higher (3 semester hours, must earn a grade of "C" or better, must be completed by the time the student has 60 semester hours.)

MATH 113	College Algebra	4*	_____	_____	_____
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\*3 credits apply to the General Ed requirements and 1 credit applies to Required Course credit

**Humanities** (3 semester hours)

**Social and Behavioral Sciences** (6 semester hours)

PSYC 233	Human Growth & Development	3	_____	_____	_____
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Must earn a grade of "B" or better for PSYC 233.

**Natural Sciences** (7 semester hours) Must earn a grade of "C" or better.

BIOL 105	Attributes of Living Systems	3	_____	_____	_____
BIOL 105L	Attributes of Living Systems Lab	1	_____	_____	_____
		3	_____	_____	_____

Choose one from ENV5 101, GEOL 103, GEOL 104, GEOL 105, PHYS 101

Course	No	Title	Sem.hrs	Grade	Term/Trns
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**Fine Arts** (3 semester hours)

**History** (3 semester hours)

HIST	_____	_____	_____	_____	_____
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**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	_____	_____	_____
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Must earn a grade of "B" or better.

**FOUNDATION COURSES** (16 semester hours)

Must earn a grade of "C" or better.

CHEM 121*	Principles of Chemistry	4	_____	_____	_____
CHEM 121L*	Principles of Chemistry Lab	1	_____	_____	_____
CHEM 122*	Principles of Organic Chemistry	4	_____	_____	_____
CHEM 122L*	Principles of Organic Chemistry Lab	1	_____	_____	_____
STAT 200	Probability and Statistics	3	_____	_____	_____

**Humanities or Social/Behavioral Sciences**

_____	_____	3	_____	_____	_____
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\* A higher level subject may be taken in the same category with advisor approval.

**BIOLOGY – LEADING TO SECONDARY EDUCATION**

**CERTIFICATION MAJOR REQUIREMENTS** (40 semester hours)

Must earn a grade of "C" or better.

**Required Core Courses** (11 semester hours)

BIOL 106	Principles of Animal Biology	3	_____	_____	_____
BIOL 106L	Principles of Animal Biology Lab	1	_____	_____	_____
BIOL 107	Principles of Plant Biology	3	_____	_____	_____
BIOL 107L	Principles of Plant Biology Lab	1	_____	_____	_____
BIOL 386	Introduction to Science Ed	3	_____	_____	_____

**Required Related Study Area** (19 semester hours)

*MATH 113	College Algebra	1	_____	_____	_____
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**Choose either GEOL 111/111L or GEOL 113/113L**

GEOL	_____	3	_____	_____	_____
GEOL	_____	1	_____	_____	_____
GEOL 112	Principles of Historical Geology	3	_____	_____	_____
GEOL 112L	Principles of Historical Geology Lab	1	_____	_____	_____
PHYS 111	General Physics	4	_____	_____	_____
PHYS 111L	General Physics Lab	1	_____	_____	_____
PHYS 112	General Physics	4	_____	_____	_____
PHYS 112L	General Physics Lab	1	_____	_____	_____

Course No	Title	Sem.hrs	Grade	Term/Trns	Course No	Title	Sem.hrs	Grade	Term/Trns
<b>Biology Electives</b> (10 Upper Division Semester Hours)					BIOL	_____	_____	_____	_____
BIOL	_____	_____	_____	_____	BIOL	_____	_____	_____	_____
BIOL	_____	_____	_____	_____	BIOL	_____	_____	_____	_____

**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) and formal acceptance to the Teacher Education Program

Course No	Title	Sem.hrs	Grade	Term/Trns	
EDUC 211	Foundations of Education	2	_____	_____	20 Field Experience Hours
EDUC 342*	Pedagogy & Assessment: Secondary/K-12	3	_____	_____	20 Field Experience Hours
EDUC 343*	Teaching to Diversity	3	_____	_____	20 Field Experience Hours
EDUC 442	Integrating Literacy Across the Curriculum	4	_____	_____	60 Field Experience Hours
EDUC 497	Content Methodology Practicum	3	_____	_____	80 Field Experience Hours
EDUC 497D	Methods of Teaching Secondary Science**	2	_____	_____	
EDUC 499G	Teaching Internship and Colloquium	12	_____	_____	600 Field Experience Hours

**Students must PASS the 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.**

\*\*This course is only offered in the fall semester. It may be taken with either the 300-level or 400-level EDUC courses but must be taken before the student teaching semester.

**\*\*\*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 BIOLOGY – 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	Spring Semester	Hours
BIOL 105	3	BIOL 106	3
BIOL 105L	1	BIOL 106L	1
ENGL 111	3	ENGL 112	3
CHEM 121	4	CHEM 122	4
CHEM 121L	1	CHEM 122L	1
MATH 113	4	STAT 200	3
	16	KINA	1
			16

### SOPHOMORE YEAR

Fall Semester	Hours	Spring Semester	Hours
BIOL 107	3	GEOL 111	3
BIOL 107L	1	GEOL 111L	1
PHYS 111	4	<u>OR</u>	
PHYS 111L	1	GEOL 113	3
PSYC 233	3	GEOL 113L	1
KINE/ 100	1	PHYS 112	4
General Education History	3	PHYS 112L	1
	16	General Education Natural Science	3
		<u>OR</u>	
		BIOL 386	3
		Foundation Humanities/Soc & Behav Sci	3
		KINA	1
			16

### JUNIOR YEAR

Fall Semester	Hours	Spring Semester	Hours
*EDUC 211	2	EDUC 342	3
GEOL 112	3	EDUC 343	3
GEOL 112L	1	BIOL 386	3
SPCH 102	3	<u>OR</u>	
Electives	4	General Education Natural Science	3
General Education Humanities	3	Electives	3
	16	General Education Social and Behavioral Science	3
			15

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

### SENIOR YEAR

Fall Semester	Hours	Spring Semester	Hours
EDUC 442	4	EDUC 499G	12
EDUC 497	3		12
EDUC 497D*	2		
General Education Fine Arts	3		
Electives	3		
	15		

\*Only offered in fall.