



# MINNESOTA STATE UNIVERSITY MANKATO

## Academic Map Proposal

Proposal Number	13406
Create Date	4/7/16
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Author	Penny Knoblich, <a href="mailto:penny.knoblich@mnsu.edu">penny.knoblich@mnsu.edu</a>
Are you the contact for this proposal?	Yes
Does this proposal require approval from multiple Colleges or Departments?	No
College	Science, Engineering and Technology, Dean: Brian Martensen
Department	Biological Sciences, Chair: Penny Knoblich
Proposal Type	Academic Map
Full Program Name	Life Science Teaching (5-12) BS
Award	BS
Emphasis	
Option	
Version Number	1
Version	Life Science Teaching (5-12) B
Version Explanation	
programType	Broad Major
Minor Required	No
Minor Specific	
Minor Specific	
Program Description	The State of Minnesota grants science teacher licensure for grades 5-8 general science, 9-12 Chemistry, 9-12 Earth Science, 9-12 Life Science, and 9-12 Physics. Students earning a degree from Minnesota State Mankato will qualify for two licenses (1) 5-8 general science and (2) 9-12 specialty.
Admission Requirement	32 earned semester hours including BIOL 105, BIOL 106, BIOL 211, and CHEM 201 with a grade of "C" or better; completed General Education Goal Area 4 (Mathematics); completed General Education Goal Area 1, Part A (English Composition); and a minimum cumulative GPA of 2.2, with a cumulative GPA in Biology courses of 2.0. The combined GPA for BIOL 105, BIOL 106, BIOL 211, and CHEM 201 must be 2.4 or better.
Advising	Each student must meet with an advisor each semester. Following the meeting the student will be given an access code which allows the student to register for classes.
Program Notes	Some terms have 16 credits because Term 8 is student teaching, and totals only 12 credit hours.
Program Phone Number	( ) -

Program Website(Url)

**Fall Year 1**

Designator	Course Number	Course Name	Credits	Milestones
BIOL	105	General Biology I	4	C or better is required
---	---	Choose one course	---	C or better is required
MATH	113	Trigonometry	3	
MATH	115	Precalculus Mathematics	4	
ENG	101	Compsition	4	C or better is required
---	---	General Education Course	---	
SOC	101	Recommended	3	
PHIL	120W	Introduction to Sociology OR Introduction to Ethics	3	
		General Education Course	0-1	

Fall Year 1 Notes

**Spring Year 1**

Designator	Course Number	Course Name	Credits	Milestones
BIOL	106	General Biology II	4	C or better is required
CHEM	201	General Chemistry I	5	C or better is required
AST	101	Introduction to Astronomy	3	C or better is required
---	---	General Education Course	---	
SOC	101	Recommended	3	
PHIL	120W	Introduction to Sociology Introduction to Ethics	3	

Spring Year 1 Notes

It is advisable to select courses in the teaching program that also satisfy the General Education Curriculum requirements.

**Fall Year 2**

Designator	Course Number	Course Name	Credits	Milestones
GEOL	121	Physical Geology	4	C or better is required
BIOL	215	General Ecology	4	C or better is required
BIOL	211	Genetics	4	C or better is required
		General Education Course	3	

Fall Year 2 Notes

You may apply to the major at the end of this semester if you have completed 32 credits, and have a minimum cumulative GPA of 2.2, a minimum biology GPA of 2.0, and a combined GPA for BIOL 105, BIOL 106, BIOL 211, and CHEM 201, of 2.4 or better.

**Spring Year 2**

Designator	Course Number	Course Name	Credits	Milestones
BIOL	301	Evolution	2	C or better is required
BIOL	220	Human Anatomy	4	C or better is required
HLTH	240	Drug Education	3	C or better is required
		General Education Course	3	

BIOL	270	General Microbiology	4	C or better is required
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Spring Year 2 Notes

### Fall Year 3

Designator	Course Number	Course Name	Credits	Milestones
BIOL	408	Vertebrate Ecology	4	C or better is required
PHYS	211	Principles of Physics I	4	C or better is required
KSP	220W	Human Relations in a Multicultural Society	3	C or better is required
KSP	222	Introduction to the Learner and Learning	2	C or better is required
BIOL		Unrestricted Elective in BIOL	3	C or better is required

Fall Year 3 Notes

BIOL 409, offered in summer, may be substituted for BIOL 408. Consider BIOL 481, Lab Supervision and Maintenance.

APPLY FOR PROFESSIONAL EDUCATION: You must have 1) 32 credits completed, 2) a cumulative GPA of 2.75 or better, 3) evidence you have registered for the MTLE Basic Skills Exam, 4) enrollment in or completion of KSP 220W and KSP 222, 5) federal background check completed, and 6) professional liability insurance(active status).

### Spring Year 3

Designator	Course Number	Course Name	Credits	Milestones
KSP	330	Planning, Instruction, and Evaluation in the Classroom.	5	C or better is required
KSP	202	Technology Integration in the Classroom	2	C or better is required
PHYS	212	Principles of Physics II	4	C or better is required
BIOL		Unrestricted Elective in BIOL	3	C or better is required
BIOL	499	Independent Study	1	C or better is required

Spring Year 3 Notes

Apply for student teaching one year before your expected student teaching semester. Apply for graduation one year before expected graduation date.

### Fall Year 4

Designator	Course Number	Course Name	Credits	Milestones
BIOL	485	Biology Teaching Methods and Materials	4	C or better is required
KSP	440	Creating Learning Environments To Engage Children, Families, and community	3	C or better is required
KSP	442	Reading, Literacy, and Differentiated Instruction in Inclusive Classrooms	3	C or better is required
GEOL	310	Earth and Space Systems	3	C or better is required
BIOL		Unrestricted Elective in BIOL	3	C or better is required

Fall Year 4 Notes

A cumulative GPA in professional education courses of 2.75 or better, a cumulative GPA in science courses of 2.5 or better, and a cumulative GPA of 2.0 or better in Biology courses, is required for graduation.

### Spring Year 4

Designator	Course Number	Course Name	Credits	Milestones
KSP	464	Professional Seminar	1	
KSP	477	Student Teaching	11	

Spring Year 4 Notes  
 Academic Map CheckList  
 Graduation Requirement

General Education = 44 credits
Writing Intensive = 2 courses (6 credits minimum)
Diverse Cultures = 2 course (6 credits minimum) from two disciplines
Major = 108 Credits
Upper-Division Requirements = 40 credits minimum
Total credits required for degree 120 Credits

<u>Date</u>	<u>Action</u>	<u>Role</u>	<u>User</u>	<u>Comments</u>
4/29/16			Knoblich, Penny	Created
4/29/16	Recommended	Chair of Biological Sciences	Knoblich, Penny	
4/29/16	Recommended	Dean of Science Engineering and Technology	Martensen, Brian	
5/22/16	Approved	Academic Affairs VP	Wells, Marilyn	

**DARS Encoder**

**AgileGrad**