



Academic Map Proposal

Proposal Number	13590
Create Date	9/16/16
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Are you the contact for this proposal?	No Jeffrey Pribyl, jeffrey.pribyl@mnsu.edu
Does this proposal require approval from multiple Colleges or Departments?	No
College	Science, Engineering and Technology, Dean: Brian Martensen
Department	Chemistry and Geology, Chair: Mary Hadley
Proposal Type	Academic Map
Is this existing or proposed program?	Existing
Full Program Name	Chemistry Teaching BS
Award	BS
Is this existing or proposed emphasis?	No Emphasis
Emphasis	
Option	
Version Number	3
Version	CHEM 316 and 360 semester 6
Version Explanation	CHEM 316 and 360 semester 6
programType	Broad Major
Minor Required	No
Minor Specific	
Minor Specific	
Program Description	<p>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 in earth science teaching, life science teaching, or physics teaching will qualify for two licenses (1) 5-8 general science and (2) 9-12 specialty. Students earning a degree from Minnesota State Mankato in chemistry teaching will qualify only for 9-12 specialty license.</p> <p>The Earth Science Teaching, Life Science Teaching and Physics Teaching majors requires the 31 credit general core and a science emphasis that ranges from 27-35 credits of science and science teaching methods courses. In addition, the student must complete a 30 credit professional education component and the 3 credit Drug Education course. The Chemistry Teaching major does not require the 31 credit general core.</p> <p>The University Science Teaching Program must meet specific competencies to meet professional accreditation and licensure requirements. To stay within the required degree limits of 120 credit hours, students are strongly advised to select courses within the 44 credit general education program that meet both teaching program and general education needs. It is important for the student to meet with their advisor to assist with program planning.</p> <p>A minor is not required for any of the science teaching programs; however, to broaden one's teaching opportunities, double majors are encouraged. For further details, the student should check with one of the science teaching advisors for an overview of available opportunities</p>
Admission Requirement	<ul style="list-style-type: none"> - a minimum of 32 earned semester credit hours - a minimum 2.75 cumulative GPA - evidence of registration for the Minnesota Teacher Licensure Examinations (MTLE) Basic Skills exam. - enrollment or completion of KSP 220 - "C" grade in ENG 101 - "C" grade in General Education Math
Advising	<p>College Advising: College of Science, Engineering & Technology Advising Center Ken Adams, Student Relations Coordinator Trafton C-125 507-389-1521</p> <p>College of Education Advising Mymique Baxter, Student Relations Coordinator 117 Armstrong Hall 507-389-1215</p>
Program Notes	<ol style="list-style-type: none"> 1. KSP 464 taken semesters 5-8, credit given only in semester 8. 2. Chem 316 offered Fall of even years only, take in Semester 3 or 5. 3. KSP 202 taken either semester 5 or 6. 4. To use this map, students must have a current ACT Math subscore of 24, or a minimum Accuplacer College Level Math score 103 or a minimum Accuplacer Calculus Readiness score of 22 or a minimum score of C or better in Math 115 or both Math 112 and Math 113. Note that 'C-' is not 'C'.
Program Phone Number	() - -
Program Website(URL)	

Fall Year 1

Designator	Course Number	Course Name	Credits	Milestones
CHEM	201	GENERAL CHEMISTRY I	5	C OR BETTER
BIOL	105	GENERAL BIOLOGY I	4	
		GENERAL EDUCATION COURSE	2-4	GPA =2.5 IN SCIENCE COURSE
		GENERAL EDUCATION COURSE	2-4	
		GENERAL EDUCATION COURSE	2-4	

Fall Year 1 Notes

GENERAL EDUCATION COURSES MINIMUM CREDITS 6

Spring Year 1

Designator	Course Number	Course Name	Credits	Milestones
CHEM	202	GENERAL CHEMISTRY II	5	C OR BETTER
MATH	121	CALCULUS I	4	C OR BETTER
		GENERAL EDUCATION COURSE	2-4	
		GENERAL EDUCATION COURSE	2-4	
		GENERAL EDUCATION COURSE	2-4	GPA =2.5 IN SCIENCE COURSES

Spring Year 1 Notes

GENERAL EDUCATION COURSES MINIMUM CREDITS 6

Fall Year 2

Designator	Course Number	Course Name	Credits	Milestones
CHEM	322	ORGANIC CHEMISTRY I	4	C OR BETTER
PHYS	211	PRINCIPLES OF PHYSICS I	4	C OR BETTER
HLTH	240	DRUG EDUCATION	3	
		GENERAL EDUCATION COURSES	4	GPA =2.5 IN SCIENCE COURSES

Fall Year 2 Notes

Spring Year 2

Designator	Course Number	Course Name	Credits	Milestones
CHEM	305	ANALYTICAL CHEMISTRY	4	C OR BETTER
CHEM	324	ORGANIC CHEMISTRY II	3	C OR BETTER
CHEM	325	ORGANIC CHEMISTRY II LABORATORY	1	
PHYS	212	PRINCIPLES OF PHYSICS II	4	
		GENERAL EDUCATION COURSE	2-4	GPA =2.5 IN SCIENCE COURSES
		GENERAL EDUCATION COURSE	2-4	

Spring Year 2 Notes

GENERAL EDUCATION COURSES MINIMUM CREDITS 4

Fall Year 3

Designator	Course Number	Course Name	Credits	Milestones
CHEM	316	DESCRIPTIVE INORGANIC MAIN GROUP CHEMISTRY	3	
CHEM	381W	INTRODUCTION TO RESEARCH	2	GPA =2.5 IN SCIENCE COURSES
KSP	202	TECHNOLOGY INTEGRATION IN THE CLASSROOM	2	
KSP	220W	HUMAN RELATIONS IN A MULTICULTURAL SOCIETY	3	
KSP	222	INTRODUCTION TO THE LEARNER AND LEARNING	2	
KSP	464	PROFESSIONAL SEMINAR	0	
		GENERAL EDUCATION COURSE	2	

Fall Year 3 Notes

Spring Year 3

Designator	Course Number	Course Name	Credits	Milestones
CHEM	340	QUANTITATIVE SKILLS FOR CHEMISTRY AND BIOCHEMISTRY I	1	C OR BETTER
CHEM	341	QUANTITATIVE SKILLS FOR CHEMISTRY AND BIOCHEMISTRY II	1	C OR BETTER
CHEM	360	PRINCIPALS OF BIOCHEMISTRY	4	GPA =2.5 IN SCIENCE COURSES
CHEM	479	TEACHING PHYSICAL SCIENCE	4	
CHEM	495	SENIOR SEMINAR	1	
KSP	330	PLANNING, INSTRUCTION, AND EVALUATION IN THE CLASSROOM	5	
KSP	494	PROFESSIONAL SEMINAR	0	

Spring Year 3 Notes

GENERAL EDUCATION COURSES MINIMUM CREDITS 4

Fall Year 4

Designator	Course Number	Course Name	Credits	Milestones
CHEM	440	PHYSICAL CHEMISTRY I	3	GPA =2.5 IN SCIENCE COURSES
CHEM	450	PHYSICAL CHEMISTRY I LABORATORY	1	
KSP	440	CREATING LEARNING ENVIRONMENTS TO ENGAGE CHILDREN, FAMILIES, AND COMMUNITY	3	
KSP	442	READING, LITERACY, AND DIFFERENTIATED INSTRUCTION IN INCLUSIVE CLASSROOMS	3	
KSP	464	PROFESSIONAL SEMINAR	0	
		GENERAL EDUCATION COURSE	2-4	
		GENERAL EDUCATION COURSE	2-4	
		GENERAL EDUCATION COURSE	2-4	

Fall Year 4 Notes

GENERAL EDUCATION COURSES MINIMUM CREDITS 6

Spring Year 4

Designator	Course Number	Course Name	Credits	Milestones
KSP	464	PROFESSIONAL SEMINAR	1	GPA =2.5 IN SCIENCE COURSES
KSP	477	5-12 STUDENT TEACHING	11	

Spring Year 4 Notes