Program & Curriculum Approval
Executive Summary

Program Title: Chemistry B.A.

Approval Status: Proposal Not Submitted
Program Last Saved: Sep 26, 2006 11:16:38 AM
By: Carol Ford

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General Information

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Campus:	University of Minnesota, Morris	*<no change>*
Career:	Undergraduate	*<no change>*
Program type:	Baccalaureate	*<no change>*
Program title (short):	Chemistry B.A.	*<no change>*
Program title (long):	Chemistry B.A.	*<no change>*
Program short description:	Chem	*<no change>*
Additional terms:	· This program is 8 semesters (4 years) long. · This program does not need any summer terms.	*<no change>*
Stakeholder college(s):	· UMM-Science & Math, Div of	*<no change>*
Degree-granting college(s):	· UMM-Science & Math, Div of	*<no change>*
Approver college(s):	· UMM-Science & Math, Div of	*<no change>*
Administrative college(s):	· UMM-Science & Math, Div of	*<no change>*
Budgetary college(s):	· 'UMM-Science & Math, Div of'=100	*<no change>*
Acad plan code(s):	· 'UMM-Science & Math, Div of'=016820227	*<no change>*
Department(s):	· Division of Science & Mathematics - Adm	*<no change>*
First term admitting students:	Fall 1960	*<no change>*
Effective date:	Fall 2005	Fall 2007
Degree:	Bachelor of Arts	*<no change>*
Catalog description:	Coursework in chemistry spans the four traditional areas of analytical, inorganic, organic, and physical chemistry. Students may also pursue a degree in chemistry with a biochemistry subfield, involving significant coursework in biology. All majors must study beginning physics and calculus. Students may also design an interdisciplinary area of concentration in chemistry-related fields, such as geochemistry or environmental science. Beginning chemistry courses satisfy the physical sciences component of the general education requirements.	Coursework in chemistry spans the four traditional areas of analytical, inorganic, organic, and physical chemistry. Students may also pursue a degree in chemistry with a biochemistry subfield, involving significant coursework in biology. All majors must study beginning physics and calculus. Students may also design an interdisciplinary area of concentration in chemistry-related fields, such as geochemistry or environmental science. Beginning chemistry courses satisfy the physical sciences component of the general education requirements.

	Chemistry majors, particularly in upper division courses, do hands-on work with chemical instrumentation and use computers in both software and hardware applications. The faculty prides itself on working closely with its students on undergraduate research projects, directed studies, and undergraduate teaching assistantships. In addition, chemistry majors are encouraged to complete summer research internships at university and industrial labs or at other research facilities, locally and nationally. Study in chemistry is the prerequisite for many preprofessional programs at UMM. Students who also do work in the Division of Education can obtain licensure in secondary education. About two-thirds of UMM's chemistry majors pursue postgraduate work toward a doctoral degree—most of them in chemistry, many in medicine, but also in other health-related fields, such as veterinary medicine and dentistry, in biological fields related to chemistry, and in a variety of other fields. The other third enter the job market upon graduation, primarily in the chemical industry or in secondary education.	Chemistry and biochemistry majors do hands-on work with chemical instrumentation and use computers in both software and hardware applications. The faculty prides itself on working closely with its students on undergraduate research projects, directed studies, and undergraduate teaching assistantships. In addition, chemistry majors are encouraged to complete summer research internships at university and industrial labs or at other research facilities, locally and nationally. Study in chemistry is the prerequisite for many preprofessional programs at UMM. Students who also do work in the Division of Education can obtain licensure in secondary education. About two-thirds of UMM's chemistry majors pursue postgraduate work toward a doctoral degree—most of them in chemistry, many in medicine, but also in other health-related fields, such as veterinary medicine, pharmacy and dentistry, in biological fields related to chemistry, and in a variety of other fields. The other third enter the job market upon graduation, primarily in the chemical industry or in secondary education. Objectives-The chemistry curriculum focuses on the structure of matter and the conditions required for material change. It is designed to prepare students for post-graduate work in a wide variety of fields, or for a career in industry or in secondary teaching.
RIASEC codes:		*<no change>*
Field of study:	Math, Engineering, and Science	*<no change>*
Program contact(s):	**U of M internet ID:** fordcj **Name:** Carol Ford **E-mail address:** fordcj@umn.edu **Telephone number:** 320/589-6300 **Campus mailing address:** UMM Div of Science and Math, RM 2550 Sci, M242A, 600 E 4th St, Morris, MN 56267	*<no change>*

Narrative Materials

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Admission Requirements

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Program Requirements

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Program length in credits:	120 credits	*<no change>*
Major length in credits:	59 to 76 credits	*<no change>*
Number of semesters of a	2	0

second language that are required:		
Specific language(s) required:	Any Second Language	No Second Language
Other requirements:		Courses may not be taken S-N. Up to 8 credits of coursework with a grade of D or D+ may be used to meet the major requirements if offset by an equivalent number of credits of A or B. The GPA in these courses must be at least 2.00. Students should consult members of the chemistry faculty in order to plan programs of study appropriate to their interests and post graduate goals. Students may complete a major in chemistry through one of two tracks--the standard chemistry major or the chemistry major with a biochemistry subfield.
Required course(s):		**Required Courses** CHEM 1101 - General Chemistry I, SCI-L (4.0 cr) CHEM 1102 - General Chemistry II, SCI-L (4.0 cr) CHEM 2301 - Organic Chemistry I, SCI (4.0 cr) CHEM 2302 - Organic Chemistry II, SCI (4.0 cr) CHEM 2311 - Organic Chemistry Lab I (1.0 cr) CHEM 2321 - Introduction to Research, SCI-L (2.0 cr) CHEM 3101 - Analytical Chemistry, SCI-L (4.0 cr) CHEM 3501 - Physical Chemistry I, SCI (4.0 cr) CHEM 3901 - Chemistry Seminar I (1.0 cr) CHEM 4901 - Chemistry Seminar II (0.0 cr) MATH 1101 - Calculus I, M/SR (5.0 cr) MATH 1102 - Calculus II, M/SR (5.0 cr) PHYS 1101 - General Physics I, SCI-L (5.0 cr) PHYS 1102 - General Physics II, SCI-L (5.0 cr) *<deleted>*

Major Core Curriculum
CHEM 1101 - General Chemistry I, SCI-L (4.0 cr)
CHEM 1102 - General Chemistry II, SCI-L (4.0 cr)
CHEM 2301 - Organic Chemistry I, SCI (4.0 cr)
CHEM 2302 - Organic Chemistry II, SCI (4.0 cr)
CHEM 2311 - Organic Chemistry Lab I (1.0 cr)
CHEM 2321 - Introduction to Research, SCI-L (2.0 cr)
CHEM 3101 - Analytical Chemistry, SCI-L (4.0 cr)
CHEM 3501 - Physical Chemistry I, SCI (4.0 cr)
CHEM 3901 - Chemistry Seminar I (1.0 cr)
CHEM 4901 - Chemistry Seminar II (0.0 cr)

		<deleted>
	Other Science Requirements MATH 1101 - Calculus I, M/SR (5.0 cr) MATH 1102 - Calculus II, M/SR (5.0 cr) PHYS 1101 - General Physics I, SCI-L (5.0 cr) PHYS 1102 - General Physics II, SCI-L (5.0 cr) ^ Return to top of Program Requirements	

Sub-plans

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Sub-plan requirement for this program:	Yes	*<no change>*
Sub-plan(s):		

Title: Chemistry, Standard

Title (long) of sub-plan:	Standard Chemistry	Chemistry, Standard
Title (short) of sub-plan:	Standard Chemistry	Chemistry, Standard
Sub-plan type:	Option	*<no change>*
Sub-plan code:	EDUCATION	*<no change>*
Description:		*<no change>*
Degree requirements:		*<no change>*
Required course(s):	**Standard Chemistry Core** CHEM 3502 - Physical Chemistry II, SCI (4.0 cr) CHEM 3511 - Physical Chemistry Lab (1.0 cr)	**Standard Chemistry Required Courses** CHEM 3502 - Physical Chemistry II, SCI (4.0 cr) CHEM 3511 - Physical Chemistry Lab (1.0 cr)
	Standard Chemistry Electives *Take 2 or more course(s) from the following:* · CHEM 3111 - Instrumental Analysis, SCI-L (4.0 cr) · CHEM 3701 - Inorganic Chemistry, SCI (3.0 cr) · CHEM 3801 - History of Chemistry, SCI (3.0 cr) · CHEM 3811 - Macromolecules, SCI (3.0 cr) · *Take the following course or course pair. BIOL 4211 and 4611 count as one course.* CHEM 4351 - Bioorganic Chemistry, SCI (3.0 cr) *or* BIOL 4611 - Biochemistry Lab (1.0 cr) BIOL 4211 - Biochemistry, SCI (4.0 cr)	**Standard Chemistry Elective Courses** *Take 2 or more course(s) from the following:* · CHEM 3111 - Instrumental Analysis, SCI-L (4.0 cr) · CHEM 3701 - Inorganic Chemistry, SCI (3.0 cr) · CHEM 3801 - History of Chemistry, SCI (3.0 cr) · CHEM 3811 - Macromolecules, SCI (3.0 cr) · CHEM 4352 - Synthesis, SCI (3.0 cr) · CHEM 4551 - Theoretical Chemistry, SCI (3.0 cr) · CHEM 4552 - Molecular Spectroscopy, SCI (3.0 cr) · CHEM 4751 - Advanced Inorganic Chemistry, SCI (3.0 cr) · *One of the course choices can be either Chem 4351 or the combination of Biol 4211 and 4611.* CHEM 4351 - Bioorganic Chemistry, SCI (3.0 cr) *or Take all of the following in the same term:* BIOL 4211 - Biochemistry, SCI (4.0 cr) BIOL 4611 - Biochemistry Lab (1.0 cr)

Title: Chemistry, Subfield Biochemistry

Title (long) of sub-plan:	Biochemistry	Chemistry, Subfield Biochemistry
Title (short) of sub-plan:	Biochemistry	Chemistry, Subfield Biochem
Sub-plan type:	Option	*<no change>*
Sub-plan code:	BIOCHEM	*<no change>*
Description:		*<no change>*
Degree requirements:		*<no change>*
Required course(s):	**Biochemistry Core** BIOL 1101 - Freshman Seminar in Biological Principles, SCI (3.0 cr) BIOL 2111 - Cell Biology, SCI-L (4.0 cr) BIOL 3101 - Genetics, SCI-L (4.0 cr) BIOL 3121 - Molecular Biology, SCI-L (5.0 cr) BIOL 4211 - Biochemistry, SCI (4.0 cr) BIOL 4611 - Biochemistry Lab (1.0 cr) CHEM 4351 - Bioorganic Chemistry, SCI (3.0 cr)	**Biochemistry Required Courses** BIOL 1111 {Approval Pending} BIOL 2111 - Cell Biology, SCI-L (4.0 cr) BIOL 3121 - Molecular Biology, SCI-L (5.0 cr) BIOL 4211 - Biochemistry, SCI (4.0 cr) BIOL 4312 {Approval Pending} CHEM 4351 - Bioorganic Chemistry, SCI (3.0 cr) BIOL 4611 - Biochemistry Lab (1.0 cr)
	Biochemistry Electives CHEM 3111 - Instrumental Analysis, SCI-L (4.0 cr) *or* CHEM 3502 - Physical Chemistry II, SCI (4.0 cr) *or* CHEM 3701 - Inorganic Chemistry, SCI (3.0 cr) *or* CHEM 3801 - History of Chemistry, SCI (3.0 cr) *or* CHEM 3811 - Macromolecules, SCI (3.0 cr) *or* 43xx-47xx CHEM course for 3 credits or more.	**Biochemistry Electives** *Take 1 or more course(s) from the following:* · CHEM 3111 - Instrumental Analysis, SCI-L (4.0 cr) · CHEM 3502 - Physical Chemistry II, SCI (4.0 cr) · CHEM 3701 - Inorganic Chemistry, SCI (3.0 cr) · CHEM 3801 - History of Chemistry, SCI (3.0 cr) · CHEM 3811 - Macromolecules, SCI (3.0 cr) · CHEM 4352 - Synthesis, SCI (3.0 cr) · CHEM 4551 - Theoretical Chemistry, SCI (3.0 cr) · CHEM 4552 - Molecular Spectroscopy, SCI (3.0 cr) · CHEM 4751 - Advanced Inorganic Chemistry, SCI (3.0 cr)

Title: Education

Title (long) of sub-plan:	Education	*<no change>*
Title (short) of sub-plan:	Education	*<no change>*
Sub-plan type:	Emphasis	*<no change>*
Sub-plan code:	EDUCATION	*<no change>*
Reason for discontinuing admission to the sub-plan:	*<Discontinued>*	This information is to be accessed from the Education Division
Approximate term by which students may no longer graduate from sub-plan:	*<Discontinued>*	F2006
Transition plan	*<Discontinued>*	No transition required, this is a correction of incorrect data entry

Title: Chemistry Honors

Title (long) of sub-plan:	Chemistry Honors	*<no change>*
Title (short) of sub-plan:	Honors	*<no change>*
Sub-plan type:	Honors	*<no change>*
Sub-plan code:	HONORS	*<no change>*
Reason for discontinuing admission to the sub-plan:	*<Discontinued>*	Is not a valid alternative to the other required subplans in chemistry
Approximate term by which students may no longer graduate from sub-plan:	*<Discontinued>*	Fall 2006
Transition plan	*<Discontinued>*	not applicable

Title: Honors

Title (long) of sub-plan:	Honors
Title (short) of sub-plan:	Honors
Sub-plan type:	Honors
Sub-plan code:	*<no change>*
Description:	The Honors Program represents an opportunity for UMM students to pursue an interdisciplinary and interdivisional curriculum and work toward graduation "with honors." All UMM students are eligible to participate in the Honors Program. Students normally apply to the program in the spring semester of their freshman year and begin coursework in their sophomore year. While everyone may apply, academic success in the fall semester, faculty recommendations, and a short essay may be used to limit the number of students to those with the proven motivation and ability to likely succeed in the program.
Degree requirements:	To graduate with honors, participants must 1) complete IS 2001H, usually in the fall of their sophomore year; 2) complete at least four other honors courses at UMM; 3) successfully complete a multidisciplinary senior honors project; and 4) earn a UMM GPA of 3.50 or higher.
Required course(s):	**Honors Requirements** IS 2001H - Honors: Traditions in Human Thought, HUM, H (2.0 cr) IS 4994H - Senior Honors Project, H (1.0-4.0 cr) *Take 4 or more course(s) from the following:* · IS 3111H - Honors: The End of the World as We've Known It: The Apocalypse Then and Now, SS, H (2.0 cr) · IS 3201H - Honors: Ideas of Order in the Medieval World, HIST, H (2.0 cr) · IS 3203H - Honors: A Cross-Section of the

Enlightenment, HIST, H (2.0 cr)
- IS 3204H - Honors: Ecological Health and the Sustainability of Common-Property Resources , ENVT, H (2.0 cr)
- IS 3205H - Honors: The Early Modern Body in Literature, Philosophy, and Science, HUM, H (2.0 cr)
- IS 3206H - Honors: Introduction to Game Theory, M/SR, H (2.0 cr)
- IS 3207H - Honors: Utopia(s), HUM, H (2.0 cr)
- IS 3208H - Honors: Totalitarianism: Imagination, Theory, and Experience, SS, H (2.0 cr)
- IS 3209H {Approval Pending}
- IS 3211H - Honors: Republic or Empire? The American 1890s, HIST, H (2.0 cr)
- IS 3221H - Honors: Open Source vs. Proprietary Techonology: The Economics of Networks and Innovation, SS, H (2.0 cr)
- IS 3231H - Honors: Drama, Philosophy, and Politics in Classical Greece, HUM, H (2.0 cr)

Title: Teaching Licensure Chemistry 9-12

Title (long) of sub-plan:	Teaching Licensure Chemistry 9-12
Title (short) of sub-plan:	Teaching Chemistry 9-12
Sub-plan type:	Specialization
Sub-plan code:	*<no change>*
Description:	Students planning to seek Minnesota teaching licensure at the secondary school level must complete licensure requirements in the discipline(s) of the subject(s) they intend to teach, the secondary teacher education program, and state and federally mandated examinations for new teachers. A minimum GPA of 2.50 is required overall, in licensure area(s), and in education courses. All courses required for teaching licensure in secondary education (discipline, professional education, or other courses) must be completed with a grade of C- or higher. Required courses may not be taken S-N unless offered S-N only.
Degree requirements:	To obtain a teaching license, an individual must have a major, a bachelor's degree, and have completed licensure requirements in the area(s) in which licensure is sought.
Required course(s):	**Chemistry 9-12 Licensure Courses** *Chem 1101, 1102—Gen. Chem. I & II* *Chem 2301, 2302—Organic Chem. I & II* *Chem 2311—Organic Chem. Lab I* *One of two:* *Chem 2312—Organic Chem. Lab II* *Chem 2321—Intro. to Research* *Chem 3101—Analytical Chem.* *Chem 3501—Physical Chem. I* *Chem 3xxx or above, one course* *One of three:* *Chem 3901, 4901—Chem. Sem. I & II (on*

research)
Chem 2993, 3993, or 4993—Directed Study in Research
Other research experience (i.e., UROP, internship)with discipline approval
Math 1101, 1102
Phys 1101, 1102
CHEM 3111 - Instrumental Analysis, SCI-L (4.0 cr)
CHEM 3801 - History of Chemistry, SCI (3.0 cr)
CHEM 3502 - Physical Chemistry II, SCI (4.0 cr)
CHEM 3511 - Physical Chemistry Lab (1.0 cr)

Admission to the Program
During fall semester of the junior or senior year, students are expected to attend an application meeting to begin the application process. Enrollment in the program is limited. The decision to admit is made during spring semester, before fall registration. The secondary education course sequence begins in fall semester.

It is recommended that students seek academic planning advice from the secondary education faculty before admission to the program is sought.
ED 2101 - Foundations and Issues in Education (1.0 cr)
ED 2111 - Tutor-Aide Practicum (1.0 cr)
Take the following course or course pair. PSY 1051 is a prerequisite.
PSY 1061 - Introduction to the Development of the Child and Adolescent, SS (4.0 cr)
or PSY 3401 - Developmental Psychology I: Child Psychology, SS (4.0 cr)
PSY 3402 - Developmental Psychology II: Adolescence, SS (2.0 cr)
PSY 1081 - Drugs and Human Behavior, SS (2.0 cr)
SPCH 1052 - Introduction to Public Speaking, E/CR (2.0 cr)
Completion of the Praxis I: Preprofessional Skills Test (PPST).
A minimum GPA of 2.50 overall and in required licensure area(s) and education courses. No grade of D will be accepted in licensure or education courses.
Approximately 90 credits completed by the end of the junior year including demonstration of satisfactory progress in each licensure area.
Approval of the faculty based on an interview, recommendations, assessment of prior experience (especially with young people and other cultures), and progress toward a degree.
Student must be admitted to UMM prior to program admission.

Student Teaching Requirements
SEED 4101 - Block I: Teaching the Middle and Secondary Student (4.0 cr)
SEED 4102 - Block II: Teaching and Learning

Strategies (4.0 cr)
SEED 4103 - Practicum Experience in the Middle and Secondary School (2.0 cr)
SCIE 4121 - Methods of Teaching Science in the Secondary School (3.0 cr)
SCIE 4122 - Methods of Teaching Science in the Middle School (1.0 cr)
Satisfactory completion of tutor aide and practicum experiences.
Spch 1052 or exemption granted by petition to the Division of Education based on satisfactory completion of high school speech course or demonstrated ability.
A minimum GPA of 2.50 overall and in required licensure area(s) and education courses. No grade of D will be accepted in licensure or education courses.
Approval of teacher education faculty based on recommendations from faculty in the student's discipline.

Middle and Secondary School Licensure Requirements
Students planning to teach in Minnesota middle and secondary schools must meet the licensure requirements of the Minnesota Board of Teaching (BOT).
These licensure requirements are subject to change when the
BOT implements new licensure rules.
Note: Students must complete licensure requirements and apply for licensure within seven years from time of admission to the licensure program. After seven years, all education courses previously taken become void and must be retaken for licensure.
SEED 4201 - Directed Student Teaching in the Middle and Secondary School, HDIV (10.0 cr)
or SEED 4204 - Directed Student Teaching in International School at the Middle and Secondary Level, IP (10.0 cr)
SEED 4901 - The Teacher and Professional Development (2.0 cr)
Ed 2101 and Ed 2111 SeEd 4101—Block I and SeEd 4102—Block II SeEd 4103—Practicum Experience SeEd 4201 or SeEd 4204—Student Teaching SeEd 4901—The Teacher and Profesional Development
Successful completion of licensure area methods course(s).
Psy 1061—Introduction to the Development of the Child and Adolescent and Psy 1081—Drugs and Human Behavior.
Spch 1052 or exemption granted by petition to the Division of Education based on satisfactory completion of high school speech course or demonstrated ability.
A minimum GPA of 2.50 overall and in required licensure area(s) and education courses. No grade of D will be accepted in licensure or education courses.
Approval of teacher education faculty based on recommendations from faculty in the student's discipline.
Passing scores on Praxis I and Praxis II and

any other state mandated exams for new teachers.

Title: Teaching Licensure General Science 5-8

Title (long) of sub-plan:	Teaching Licensure General Science 5-8
Title (short) of sub-plan:	Teaching General Science 5-8
Sub-plan type:	Specialization
Sub-plan code:	*<no change>*
Description:	Students planning to seek Minnesota teaching licensure at the secondary school level must complete licensure requirements in the discipline(s) of the subject(s) they intend to teach, the secondary teacher education program, and state and federally mandated examinations for new teachers. A minimum GPA of 2.50 is required overall, in licensure area(s), and in education courses. All courses required for teaching licensure in secondary education (discipline, professional education, or other courses) must be completed with a grade of C- or higher. Required courses may not be taken S-N unless offered S-N only.
Degree requirements:	To obtain a teaching license, an individual must have a major, a bachelor's degree, and have completed licensure requirements in the area(s) in which licensure is sought.
Required course(s):	**General Science 5-8 Licensure Courses** *Biol 2101—Evolution of Biodiversity (Biol 1101 prereq is waived)* *Biol 2111—Cell Biology* *Chem 1101—General Chemistry I* *Chem 1102—General Chemistry II* *Geol 1101—Physical Geology* *One of two:* *Phys 1091—Principles of Physics I* *Phys 1101—General Physics I* *One of two:* *Phys 1092—Principles of Physics II* *Phys 1102—General Physics II* BIOL 2101 - Evolution of Biodiversity, SCI-L (4.0 cr) BIOL 2111 - Cell Biology, SCI-L (4.0 cr) GEOL 1101 - Physical Geology, SCI-L (4.0 cr) CHEM 3111 - Instrumental Analysis, SCI-L (4.0 cr) CHEM 3801 - History of Chemistry, SCI (3.0 cr) CHEM 3502 - Physical Chemistry II, SCI (4.0 cr) CHEM 3511 - Physical Chemistry Lab (1.0 cr) **Admission to the Program** *During fall semester of the junior or senior year, students are expected to attend an application meeting to begin the application process. Enrollment in the program is limited. The decision to admit is made during spring semester, before fall registration. The*

secondary education course sequence begins in fall semester.

It is recommended that students seek academic planning advice from the secondary education faculty before admission to the program is sought.
ED 2101 - Foundations and Issues in Education (1.0 cr)
ED 2111 - Tutor-Aide Practicum (1.0 cr)
Take the following course or course pair. PSY 1051 is a prerequisite.
PSY 1061 - Introduction to the Development of the Child and Adolescent, SS (4.0 cr)
or PSY 3401 - Developmental Psychology I: Child Psychology, SS (4.0 cr)
PSY 3402 - Developmental Psychology II: Adolescence, SS (2.0 cr)
PSY 1081 - Drugs and Human Behavior, SS (2.0 cr)
SPCH 1052 - Introduction to Public Speaking, E/CR (2.0 cr)
Completion of the Praxis I: Preprofessional Skills Test (PPST).
A minimum GPA of 2.50 overall and in required licensure area(s) and education courses. No grade of D will be accepted in licensure or education courses.
Approximately 90 credits completed by the end of the junior year including demonstration of satisfactory progress in each licensure area.
Approval of the faculty based on an interview, recommendations, assessment of prior experience (especially with young people and other cultures), and progress toward a degree.
Student must be admitted to UMM prior to program admission.

Student Teaching Requirements
SEED 4101 - Block I: Teaching the Middle and Secondary Student (4.0 cr)
SEED 4102 - Block II: Teaching and Learning Strategies (4.0 cr)
SEED 4103 - Practicum Experience in the Middle and Secondary School (2.0 cr)
SCIE 4121 - Methods of Teaching Science in the Secondary School (3.0 cr)
SCIE 4122 - Methods of Teaching Science in the Middle School (1.0 cr)
Satisfactory completion of tutor aide and practicum experiences.
Spch 1052 or exemption granted by petition to the Division of Education based on satisfactory completion of high school speech course or demonstrated ability.
A minimum GPA of 2.50 overall and in required licensure area(s) and education courses. No grade of D will be accepted in licensure or education courses.
Approval of teacher education faculty based on recommendations from faculty in the student's discipline.

Middle and Secondary School Licensure

Requirements

Students planning to teach in Minnesota middle and secondary schools must meet the licensure requirements of the Minnesota Board of Teaching (BOT).
These licensure requirements are subject to change when the
BOT implements new licensure rules.
Note: Students must complete licensure requirements and apply for licensure within seven years from time of admission to the licensure program. After seven years, all education courses previously taken become void and must be retaken for licensure.

SEED 4201 - Directed Student Teaching in the Middle and Secondary School, HDIV (10.0 cr)

or SEED 4204 - Directed Student Teaching in International School at the Middle and Secondary Level, IP (10.0 cr)

SEED 4901 - The Teacher and Professional Development (2.0 cr)

Ed 2101 and Ed 2111 SeEd 4101—Block I and SeEd 4102—Block II SeEd 4103—Practicum Experience SeEd 4201 or SeEd 4204—Student Teaching SeEd 4901—The Teacher and Profesional Development

Successful completion of licensure area methods course(s).

Psy 1061—Introduction to the Development of the Child and Adolescent and Psy 1081—Drugs and Human Behavior.

Spch 1052 or exemption granted by petition to the Division of Education based on satisfactory completion of high school speech course or demonstrated ability.

A minimum GPA of 2.50 overall and in required licensure area(s) and education courses. No grade of D will be accepted in licensure or education courses.

Approval of teacher education faculty based on recommendations from faculty in the student's discipline.

Passing scores on Praxis I and Praxis II and any other state mandated exams for new teachers.

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