### Curriculum Proposal

**BIOL 18-19 #10**

<table>
<thead>
<tr>
<th>Packet Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1 Summary</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course modifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.2 BIOL 6894 Advanced Graduate Laboratory Projects (2 credits) to Advanced Graduate Project (3 credits); description change</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>New Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.4 BIOL 6880 Seminar (1 credit)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Drops</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.17 BIOL 6300 Advanced Project in Literature Review (2 credits)</td>
</tr>
<tr>
<td>1.18 BIOL 6400 Advanced Project in Methodology (2 credits)</td>
</tr>
<tr>
<td>1.19 BIOL 6896 Advanced Graduate Field Projects (2 credits)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Program modification</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.20 Biology, M.S.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Signatures</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.24</td>
</tr>
</tbody>
</table>
BSU Curriculum Forms

Form 1

Curriculum Modification Summary

College: Business, Mathematics and Science
Department: Biology
Proposer: Elizabeth Rave
Proposer’s position: Professor of Biology
Describe the modification(s) you propose, and how it (/they) will work to students' advantage. (This description and explanation will be included in Curriculum Report packets forwarded to the Faculty Senate.):

- Drop BIOL 6300 Advanced Project in Literature Review
- Drop BIOL 6400 Advanced Project in Methodology
- Drop BIOL 6896 Advanced Graduate Field Projects
- Eliminate BIOL 6300/ENVR 6300 as a core requirement in the program
- Eliminate BIOL 6400/ENVR 6400 as a core requirement in the program
- Eliminate ENVR 6890 Grants and Contracts as an option
- Eliminate ENVR 6350 Computer Applications in Statistics as an option
- Modify course title, description, and credit number for BIOL 6894
- Add BIOL 6880 Seminar

Modifications proposed (specify number of each):
  _1__Course Modification(s) (form 2)
  _1__New Course(s) (form 3)
  _3__Course Drop(s) (form 4)
  _1__Program Modification(s) (form 5)
  _____New Program(s) (form 6)
  _____Program Drop(s) (form 7)

The modifications affect (check):
  _____Liberal Education
  _____Undergraduate Curriculum
  _X_ Graduate Curriculum
  _____Teacher Licensure Program(s)
BSU Curriculum Forms

Form 2
Updated 9.19.15

Course Modification Form

Current Course Number(s):
   Undergraduate:
   Graduate: BIOL 6894
Proposed Course Number(s), if different:
   Undergraduate:
   Graduate:

Current Course Title: Advanced Graduate Laboratory Projects
Proposed Course Title, if different: Advanced Graduate Project

Current Course Description: Students learn laboratory techniques and carry out laboratory research under the supervision of a faculty advisor.
Proposed Course Description, if different: Students learn laboratory or field techniques and carry out research under the supervision of a faculty advisor.

Current Credits: 2 credits
Proposed Credits, if different: 3 credits

Current Prerequisite(s):
   Undergraduate:
   Graduate:
Proposed Prerequisite(s), if different:
   Undergraduate:
   Graduate:

1) Reason(s) for change(s): The proposed course description and credit number more accurately reflect the course content.

2) May this modified course replace the current course for students remaining in the old curriculum? Yes __X__ No ______ If not, please drop the current course and submit a new course form for the modification.

3) Do these modifications change any of the following? For all Yes answers, please provide updated information on the next page.
   Student Learning Outcomes Yes _____ No __X__
   Major Content Areas Yes _____ No __X__
   Projected Maximum Class Size (Cap) Yes _____ No __X__
4) Current Course fee(s) per student: $15 per credit differential tuition for: course supplies
Proposed Course fee(s) per student, if different: $
for:

5) Service Areas:
This course is a requirement or an elective in the programs/areas listed below. To locate where this course appears please search the online catalog, as follows:
   a) go to http://www.bemidjistate.edu/academics/catalog/ and choose the most recent catalog(s),
   b) click on “Areas of Study, and Course Descriptions,”
   c) click on “PDF of Entire Catalog” in upper right,
   d) press Ctrl F, and enter the prefix and number of the course(s) from this form.

   Non-licensure programs:
   Biology, M.S.

   Teacher Licensure programs:

   Liberal Education:

   The above “service area” programs/departments were notified of this modification on ________ (date) by __________________________ (mail, email, or phone).

Please check one of the items below:

______ No comments were received from other programs or departments within one week of the notification.

______ Comments were received within one week of the notification, and are attached.
BSU Curriculum Forms

Form 3
Updated: 9.19.15

New Course Form

Course Number:
  Undergraduate: BIOL 6880

Course Title: Seminar

Course Description:

This course is designed to guide biology graduate students in completion of their M.S. in Biology. Students will take the course four consecutive semesters. Each semester students will have specific requirements for completing the course, which will move them towards completion of their degree.

Credits: 1

Prerequisite(s):
  Undergraduate: None
  Graduate: None

1. Reason(s) for creating this course:
   The Biology Department is renovating our graduate program (M.S. Biology) to better serve our students. The Graduate Seminar will be taken each semester of the graduate program and be used to help students stay on schedule for completing their degree.

2. How often will this course be offered?
   Every Fall and Spring Semester

3. What are the student learning outcomes for the course (please precede each outcome with "Students will...")?

   Students Will:
   - Develop and execute effective presentation skills for two distinct presentation types:
     - Casual summary presentations to a professional audience and a lay audience.
     - Formal presentations to a professional audience and a lay audience.
   - Actively Critique and provide constructive feedback of the professional and lay audience presentation delivered by course participants.
   - Design, evaluate, and modify as needed an Academic Plan that maps coursework and writing tasks that allow the completion of the M.S. in Biology within 4 to 5 semesters.
4. What are the major content areas for the course?
   Presenting and preparing materials for oral and written presentation.

5. Is this course repeatable for credit, and if so, what is the maximum number of credits that can be earned?
   Yes
   Maximum of 4 credits

6. If this course is intended primarily for off-campus delivery (not offered on campus), what delivery mechanism will be used?

7. What is the projected maximum class size (cap)?
   24

8. What qualified faculty will be available to teach this course?
   All Biology Faculty that are members of the graduate faculty are eligible to teach this course.

NOTE WELL: Department and dean, in approving this proposal, attest both to the adequacy of the qualifications of faculty here named, and to their availability to teach the course at the frequency specified above, without excessive overload or disruption to other curriculum.

9. What additional library and other resources need or should be provided for this course, that are not already available?

10. What special personal property or service fee(s) would be charged to students taking this course? These charges would be for 1) items that are retained by the student and have an educational or personal value beyond the classroom, or 2) services that are on the student’s behalf (see MnSCU Board Policy 5.11).
   Amount per student: $
   For:

11. Attach a sample syllabus for the course. Note: if this course is double-numbered (u-grad/grad), the syllabus must include an additional component for graduate students.
# BIOL 6880: Seminar

**Mondays 4:00 – 4:50 pm**  
Sattgast 205  
Fall 2018

## Course Syllabus

<table>
<thead>
<tr>
<th>Course Description:</th>
<th>Professor:</th>
</tr>
</thead>
</table>
| This course is designed to guide biology graduate students in completion of their M.S. in Biology. Students will take the course four consecutive semesters. Each semester students will have specific requirements for completing the course, which will move them towards completion of their degree. | Dr. Mark Wallert  
Office: Sattgast 218H  
Phone: 218-755-2925  
Email: mark.wallert@bemidjistate.edu |

| Learning Objectives: |  |
|----------------------|  |
| • Develop and execute effective presentation skills for two distinct presentation types:  
  o Casual summary presentations to a professional audience and a lay audience.  
  o Formal presentations to a professional audience and a lay audience.  
• Actively Critique and provide constructive feedback of the professional and lay audience presentation delivered by course participants.  
• Design, evaluate, and modify as needed an Academic Plan that maps coursework and writing tasks that allow the completion of the M.S. in Biology within 4 to 5 semesters. |  |

| Attendance: |  |
|-------------|  |
| • Class attendance is required with exception of specific excused absences  
  o Exceptions must be approved prior to missing class  
  o Exceptions must be approved by both instructor and graduate advisor  
  o Final course grade will be reduced by one letter grade for each unexcused absence  
  o In case of illness or family emergency contact instructor as soon as possible  
• Attendance to seminars outside of class time will be required |  |

| Seminar Evaluations: |  |
|---------------------|  |
| • Students will complete a written evaluation of each seminar presented in the course  
• Evaluations of seminars presented by students in the course will be discussed at a following session  
• Evaluations of guest speakers will be turned in to the instructor |  |
Student Achievement Conference:
- Students are required to submit an abstract and present at the Student Achievement Conference each spring
  - First year students may present a poster or oral presentation
  - Second year student must present an oral presentation

Grades:
- Course grades are letter grades based upon a 92%, 84%, 76%, 68% scale.
  - Attendance 20%
  - Writing Assignments 20%
  - Informal Presentation 20%
  - Formal Presentation(s) 40%

Accessibility Services:
BSU is committed to making all educational programs, course materials, services and activities sponsored by the University accessible to individuals with disabilities. Students requesting accommodations due to a disability or other need for access should contact Accessibility Services as soon as possible. Accessibility Services is located at Decker Hall 202. PH: 218.755.3883 or email: disabilityservices@bemidjistate.edu. This information is also available through Minnesota Relay Services at 800.627.3529.
BIOL 6880: Seminar
Mondays 4:00 – 4:50 p.m.
Sattgast 205
Fall 2018

Progress Report and Acknowledgement of Expectations

Name: ________________________________
Semester: ______________________________
Advisor: ________________________________
Committee (if applicable): _____________ . __________________________

Progress Report: No more than one paragraph describing your progress towards program completion (classes, research, and writing).

I verify that I have printed a copy of each syllabus component for Biology 6930: Seminar, taught by Dr. Wallert, Fall Semester 2018. I acknowledge that I understand the course and graduate program requirements as described. I accept all responsibilities of a graduate student at Bemidji State University. I agree to follow all University and course policies.

_________________________________________  _____________
Signature                                      Date
BIOL 6880: Seminar
Mondays 4:00 – 4:50 pm
Sattgast 205
Fall 2018

First Semester Syllabus

Course Requirements:

1. Writing/Reading Assignments:
   - Developing a reference list to be used for your graduate proposal
     - Should include both review articles and primary literature. The number of references may vary by field. Discuss this with your advisor.
     - After consultation with advisors, students will follow the format of the Publication Manual of the American Psychological Association or an appropriate journal in their area of expertise. Students must provide a complete description and examples for the journal format they wish to use to the School of Graduate Studies when they submit their final draft for formatting review.
     - First draft of proposal introduction

2. Informal Presentation:
   - 3-5 minute table discussion of project

3. Research Presentation:
   - 10-15 minute PowerPoint presentation plus 5 minutes for questions
     - Presentation should outline project
     - Include published and preliminary data that is the basis for the project
     - Include proposed project timeline

Program Expectations:

1. Advisor Meetings:
   - Biology Department recommends you schedule a weekly meeting with your advisor
   - Your advisor may require additional meetings with you individually or as part of the research group

2. Graduate Committee
   - Your graduate committee consists of at least three members (including the advisor). At least two from the department and it is recommended that one is from outside the program/department
• Choose two faculty members to serve as part of your graduate committee. These can be adjunct graduate faculty members from the DNR or other agencies.

3. Proposal Writing
   • Outline introduction and materials/methods section of proposal
   • Complete first draft of proposal introduction

4. Forms
   • Complete and submit Form 2- Application for Admission to Candidacy
   • Form can be found here: https://www.bemidjistate.edu/academics/graduate-studies/graduate-student-resources/student-requirements/candidacy/

5. Available Funding:
   • Travel funding for presenting at meetings is available through the Biology Department BIO Fund
   • Gurnee Bridgeman scholarship is available with a spring semester application deadline

6. Classes:
   • See graduate curriculum for required coursework and recommended schedules

7. Graduate Assistantships:
   • Biology Department funds 10 graduate assistantships each semester
   • Students receiving assistantships are required to teach in the undergraduate biology program
   • They receive six credits per semester tuition wavier and an $8,500 per year stipend
   • Contact Dr. Holly LaFerriere, Biology Graduate Coordinator for more information
BIOL 6880: Seminar  
Mondays 4:00 – 4:50 pm  
Sattgast 205  
Fall 2018  
Second Semester Syllabus

Course Requirements:

1. Writing/Reading Assignments:
   a. Final draft of proposal introduction
   b. First draft of materials/methods/anticipated results
   c. First draft of complete proposal by midterm

2. Informal Presentation:
   a. 3-5 minute table discussion of project

3. Research Presentation:
   a. 20-25 minute PowerPoint presentation plus 5 minutes for questions
      i. An abbreviated version of your proposal defense

Program Expectations:

1. Advisor Meetings:
   a. Biology Department recommends you schedule a weekly meeting with your advisor
   b. Your advisor may require additional meetings with you individually or as part of the research group

2. Graduate Committee
   a. Meet twice with your graduate committee members
      i. Once to inform them of your progress with your proposal
      ii. Once to coordinate a time to defend your proposal

3. Proposal Writing
   a. Complete final draft of proposal
   b. Defend proposal by end of semester
      i. If you defend in the summer, you must pay for one graduate credit
      ii. It is preferred that you defend in the fall or spring semesters
      iii. The oral defense is not supposed to be scheduled during the last week of classes nor during finals and should be between 1-2 hours in length.

4. Forms
   a. Complete and submit Form 3- Graduate Research Paper/Thesis Proposal
   b. Form can be found here: https://www.bemidjistate.edu/academics/graduate-studies/graduate-student-resources/student-requirements/ma-ms-track/
5. Available Funding:
   a. Travel funding for presenting at meetings is available through the Biology Department BIO Fund
   b. Gurnee Bridgeman scholarship is available with a spring semester application deadline

6. Classes:
   a. See graduate curriculum for required coursework and recommended schedules

7. Graduate Assistantships:
   a. Biology Department funds 10 graduate assistantships each semester
   b. Students receiving assistantships are required to teach in the undergraduate biology program
   c. They receive six credits per semester tuition waiver and an $8,500 per year stipend
   d. Contact Dr. Holly LaFerriere, Biology Graduate Coordinator for more information
BIOL 6880: Seminar  
Mondays 4:00 – 4:50 pm  
Sattgast 205  
Fall 2018

Third Semester Syllabus

Course Requirements:

1. Writing/Reading Assignments:  
   a. Complete an outline of your thesis  
   b. Complete first draft of chapter 1/background for thesis

2. Informal Presentation:  
   a. 3-5 minute table discussion of project

3. Research Presentation:  
   a. 10-15 minute PowerPoint presentation plus 5 minutes for questions  
      i. Presentation should outline data/data analysis for thesis

Program Expectations:

1. Advisor Meetings:  
   a. Biology Department recommends you schedule a weekly meeting with your advisor  
   b. Your advisor may require additional meetings with you individually or as part of the research group

2. Graduate Committee  
   a. Meet once with your graduate committee members as a group to update them on your progress with your thesis and discuss any necessary changes or additions.

3. Thesis Writing  
   a. Become familiar with thesis format  
   b. Outline components of thesis  
   c. Complete first draft of chapter 1/background for thesis  
   d. Continue data analysis and figure preparations  

4. Written Examinations:
a. The written exam(s) may include all course work, research and special projects the student has completed as a part of their program of study. Consult with your committee.
b. Your written exam(s) must be scheduled before completing Form 4
c. It is highly recommended that you complete all your elective coursework before completing your written exam(s)

5. Forms
   a. No forms are necessary to submit during this semester

6. Available Funding:
   a. Travel funding for presenting at meetings is available through the Biology Department BIO Fund
   b. Graduate school mini-grants are available after you have completed 12 credits and have successfully completed Form 3

7. Classes:
   a. See graduate curriculum for required coursework and recommended schedules

8. Graduate Assistantships:
   a. Biology Department funds 10 graduate assistantships each semester
   b. Students receiving assistantships are required to teach in the undergraduate biology program
   c. They receive six credits per semester tuition waiver and an $8,500 per year stipend
   d. Contact Dr. Holly LaFerriere, Biology Graduate Coordinator for more information
BIOL 6880: Seminar
Mondays 4:00 – 4:50 pm
Sattgast 205
Fall 2018

Fourth Semester Syllabus

Course Requirements:
1. Writing/Reading Assignments:
   a. Complete first draft of thesis by midterm

2. Informal Presentation:
   a. 3-5 minute table discussion of career plan

3. Research Presentation:
   a. 20-25 minute PowerPoint presentation plus 5 minutes for questions
      i. An abbreviated version of your thesis defense

Program Expectations:
1. Advisor Meetings:
   a. Biology Department recommends you schedule a weekly meeting with your advisor. Due to wrapping up graduate degree and completing thesis, more frequent meetings may be necessary.
   b. Your advisor may require additional meetings with you individually or as part of the research group

2. Graduate Committee
   a. Meet with your committee members as a group to communicate about the progress of your thesis
   b. Schedule thesis defense according to availability of committee members.
      i. The oral defense is not supposed to be scheduled during the last week of classes nor during finals and should be between 1-2 hours in length.

3. Thesis Writing
   a. Complete thesis
4. Written Examinations:
   a. The written exam(s) may include all course work, research and special
      projects the student has completed as a part of their program of study.
      Consult with your committee.
   b. Your written exam(s) must be scheduled before completing Form 4
   c. It is highly recommended that you complete all your elective coursework
      before completing your written exam(s)

5. Forms
   a. Complete and submit Form 4- Application for Graduation
      i. Form 4 can be found here:  
         https://www.bemidjistate.edu/academics/graduate-studies/graduate-
         student-resources/student-requirements/ma-ms-track/
      ii. Form 4 should be submitted the first week of the semester of
          anticipated graduation along with a preliminary CV (or by March 1 if
          a summer graduation is expected)
   b. Complete and submit Form 5- Graduate Research/Thesis Paper Pre-Defense:
      i. Form 5 can be found here:  
         https://www.bemidjistate.edu/academics/graduate-studies/graduate-
         student-resources/student-requirements/ma-ms-track/
      ii. Form 5 must be submitted along with your thesis
      iii. You must submit this form three weeks before the day of your defense
      iv. A professor or faculty member outside of the Biology Department will
          be appointed as your graduate representative
      v. At this point an official day, time, and room can be scheduled for your
          defense
   c. Complete Form 6- Graduate Petition:
      i. Form 6 can be found here:
         1. https://www.bemidjistate.edu/academics/graduate-studies/graduate-
            student-resources/student-requirements/
      ii. Bring this form to your thesis defense
   d. Final version of thesis submitted to graduate office
      i. Complete any edits required by your committee
      ii. Print two copies of thesis
         1. One on resume paper (20-pound bond having 25 to 100 percent
            rag or cotton content)
         2. One of normal paper

6. Available Funding:
   a. Travel funding for presenting at meetings is available through the Biology
      Department BIO Fund
   b. Graduate school mini-grants are available after you have completed 12
      credits and have successfully completed Form 3
BSU Curriculum Forms

Form 4

Course Drop Form
(Use this form to drop a course from the university curriculum file.
To drop a course from a program only, use Form 5 Program Modification Form)

Course Number:
  Undergraduate:
  Graduate: BIOL 6300

Course Title: Advanced Project in Literature Review
**NOTE: ENVR 6300 Advanced Project in Literature will remain unaffected.

New or current courses that will universally replace this dropped course for students remaining
in the old curriculum:
ENVR 6300 Advanced Project in Literature OR 2 credits of BIOL 6880 Seminar

This dropped course is a requirement or an elective in the programs/areas listed below. To locate
where this course appears please search the online catalog, as follows:
  1) go to http://www.bemidjistate.edu/academics/catalog/ and choose the most recent
catalog(s),
  2) click on “Areas of Study, and Course Descriptions,”
  3) click on “PDF of Entire Catalog” in upper right,
  4) press Ctrl F, and enter the prefix and number of the course(s) from this form.

  Non-licensure programs:
  Environmental Studies (only for ENVR 6300 so N/A)
  Biology, M.S.

  Teacher Licensure programs:

  Liberal Education:

The above “service area” programs/departments were notified of this modification
on _9/26/18_______ (date) by __email________________________ (mail, email, or phone).

Please check one of the items below:

__X__ No comments were received from other programs or departments within one week of
the notification.

______ Comments were received within one week of the notification, and are attached.

Reason(s) for dropping this course: This course is no longer relevant to the MS program.
BSU Curriculum Forms

Form 4

Course Drop Form
(Use this form to drop a course from the university curriculum file.
To drop a course from a program only, use Form 5 Program Modification Form)

Course Number:
  Undergraduate: 
  Graduate: BIOL 6400

Course Title: Advanced Project in Methodology

**NOTE: ENVR 6400 Advanced Project in Methodology will remain unaffected.

New or current courses that will universally replace this dropped course for students remaining in the old curriculum:
ENVR 6400 Advanced Project in Methodology OR 2 credits of BIOL 6880 Seminar

This dropped course is a requirement or an elective in the programs/areas listed below. To locate where this course appears please search the online catalog, as follows:
  1) go to http://www.bemidjistate.edu/academics/catalog/ and choose the most recent catalog(s),
  2) click on “Areas of Study, and Course Descriptions,”
  3) click on “PDF of Entire Catalog” in upper right,
  4) press Ctrl F, and enter the prefix and number of the course(s) from this form.

Non-licensure programs:
  Environmental Studies (only for ENVR 6400 so N/A)
  Biology, M.S.

Teacher Licensure programs:

Liberal Education:

The above “service area” programs/departments were notified of this modification on _9/26/18_____ (date) by __email________________ (mail, email, or phone).

Please check one of the items below:

__X__ No comments were received from other programs or departments within one week of the notification.

______ Comments were received within one week of the notification, and are attached.

Reason(s) for dropping this course: This course is no longer relevant to the MS program.
BSU Curriculum Forms

Form 4

Course Drop Form
(Use this form to drop a course from the university curriculum file.
To drop a course from a program only, use Form 5 Program Modification Form)

Course Number:
   Undergraduate:
   Graduate: **BIOL 6896**

Course Title: **Advanced Graduate Field Projects**

New or current courses that will universally replace this dropped course for students remaining
in the old curriculum: **BIOL 6894**

This dropped course is a requirement or an elective in the programs/areas listed below. To locate
where this course appears please search the online catalog, as follows:
   1) go to [http://www.bemidjistate.edu/academics/catalog/](http://www.bemidjistate.edu/academics/catalog/) and choose the most recent
catalog(s),
   2) click on “Areas of Study, and Course Descriptions,”
   3) click on “PDF of Entire Catalog” in upper right,
   4) press Ctrl F, and enter the prefix and number of the course(s) from this form.

   Non-licensure programs:
      Biology, M.S.

   Teacher Licensure programs:

   Liberal Education:

The above “service area” programs/departments were notified of this modification on ________
(date) by ____________________ (mail, email, or phone).

Please check one of the items below:

______ No comments were received from other programs or departments within one week of
the notification.

______ Comments were received within one week of the notification, and are attached.

Reason(s) for dropping this course:

The course content will now be taught in the modified version of BIOL 6894.
BSU Curriculum Forms

Form 5

Program Modification Form

Program to be modified: Biology MS graduate program

List all proposed change(s):

- Drop BIOL 6300 Advanced Project in Literature Review
- Drop BIOL 6400 Advanced Project in Methodology
- Drop BIOL 6896 Advanced Graduate Field Projects
- Eliminate BIOL 6300/ENVR 6300 as a core requirement in the program
- Eliminate BIOL 6400/ENVR 6400 as a core requirement in the program
- Eliminate ENVR 6890 Grants and Contracts as an option
- Eliminate ENVR 6350 Computer Applications in Statistics as an option
- Modify course title, description, and credit number for BIOL 6894
- Add BIOL 6880 Seminar

Reason(s) for the change(s):

The changes better reflect the needs of the graduate students by better preparing them for the workplace or for more advanced studies.

Note: In order to avoid hidden prerequisites, if a course is being dropped from this program (but not from the entire curriculum), please check for which remaining courses may include this dropped course as a prerequisite. Course prerequisites may be found in the online catalog (http://www.bemidjistate.edu/academics/catalog/). Remedies for hidden prerequisites may be found under Curriculum Forms at (http://www.bemidjistate.edu/faculty_staff/faculty_association/forms/).

Note: If a course from another department/program was either added to or dropped from this program, please notify the chair/coordinator of that course's department/program and indicate the following:
The course’s home department/program was notified of the addition or dropping of their course(s) on _9/26/18________ (date) by __email________________ (mail, email, or phone).

Please check one of the items below:

___X___ No comments were received from other programs or departments within one week of the notification.

_______ Comments were received within one week of the notification, and are attached.
Note: If this is a joint program, the signatures of both department chairs (and both deans, if different colleges) must be provided.

Alert: Attach a copy of the current program showing the marked changes. Please copy the current program from the online catalog (http://www.bemidjistate.edu/academics/catalog/) and paste it into Word. Then use either the Track Changes feature under Tools, or the underline and strikethrough Font feature under Format. (Please note that the Track Changes feature may be easily switched on and off by holding down the Ctrl+Shift+E keys.)
Master Of Science - Biology

The Master of Science is the highest degree awarded by the Biology Department. It reflects the range and depth of biology sub-disciplines and broadens students' horizons through both course work and original scientific research. The research culminates in an original thesis or completion of an exhaustive work of a scholarly nature. Students must consult with their graduate academic advisor in biology before developing their program.

Preparation Requirements

Undergraduate major in biology or related field.
Minimum 24 undergraduate semester credits in biology or related field.
Minimum GPA of 3.00 in the sciences and mathematics strongly recommended.
GRE general exam required.

University Requirements

See Section IV. Policies and Procedures for degree requirements.

A one-page letter of intent stating research interests and future career goals is required of all applicants.

Course Work Requirements

In completing the M.S. degree in Biology, please note that at least 50 percent of the course credits, outside of Thesis (BIOL 6990) must be at the 6000 level.

Students may be required by the advisor to take additional courses to offset weaknesses in subject areas.

I. Required Core

- BIOL 6300 Advanced Project in Literature Review (2 credits)
- ENVR 6300 Advanced Project in Literature Review (2 credits)
- BIOL 6350 Computer Applications in Statistics (3 credits)
- ENVR 6350 Computer Applications in Statistics (3 credits)
- BIOL 6400 Advanced Project in Methodology (2 credits)
- ENVR 6400 Advanced Project in Methodology (2 credits)
- BIOL 6890 Grants and Contracts (3 credits)
- ENVR 6890 Grants and Contracts (3 credits)
- BIOL 6894 Advanced Graduate Laboratory Projects (2 credits)
- ENVR 6896 Advanced Graduate Field Projects (2 credits)
- BIOL 6890 Grants and Contracts (2 credits)
- BIOL 6894 Advanced Graduate Project (3 credits)
BIOL 6880 Seminar (1 credit)*

*Must be taken four times over four semesters for 4 credits

Subtotal 12 Credits

II. Required Electives

A. Select with the consent of the advisor a minimum of 12 semester credits of graduate level course work in Biology or related field, of which a minimum of 6 semester credits must be in Biology.

Subtotal 12 Credits

III. Required Research

BIOL 6990 Thesis (6 credits)

Subtotal 6 Credits

Total Semester Credits Required for Degree 30 Credits

Competency Requirement

Statistics: A working knowledge of applied statistics. This requirement may be satisfied by successfully completing BIOL 6350 Computer Applications in Statistics, or ENVR 6350 Computer Applications in Statistics.

Written Examination

All major programs require satisfactory completion of a final written examination, which needs to be successfully completed prior to scheduling the oral examination. Please consult with your academic advisor for requirements specific to your area of study.
BSU Curriculum Forms

Form 8
Updated: 09.18.15

Signatures

Elizabeth Rave / Professor / 10.03.18
Proposer / Title / Date

Mark Wallert / Chair / Biology / 10.04.18
Chair or Director / Department or Program / Date
Note: "All departmental recommendations [on curriculum] must be reviewed and approved by the department's faculty." -- IFO/MnSCU Master Agreement 2009-2011, 20.A.3 (p. 80).

At this point, packet goes to Records Office/Curriculum Coordinator to be logged in to the Curriculum Proposal Progress Grid.

Bonnie Higgins / Business, Mathematics and Science / 10.09.18
Dean / College / Date

Note: If proposal is sent back to the Proposer, please notify the Curriculum Coordinator. If approved, packet goes to Academic Affairs Office.