

# ACADEMIC SENATE PROPOSAL TRACKING SHEET

**(Document To Be Originated By Academic Senate Secretary On Canary Color Paper)**

All proposals **MUST** have their originating college faculty body (Ex. Nursing, Technical Sciences, Arts & Sciences, Education) approval and must be signed by the submitter and the college chair/dean before being submitted to the academic senate secretary.

1. Submit all proposals (using the appropriate Academic Senate program/degree and/or course revision forms) to the Academic Senate Secretary.
2. The Academic Senate Secretary logs and numbers items and forwards them to the appropriate Academic Senate subcommittee(s): Teacher Education (if applicable), General Education (if applicable), or Curriculum.
3. The Academic Senate subcommittee(s) consider(s) the proposal. If approved, the proposal is forwarded to the next committee. If a committee disapproves the proposal, the originator may request that the item be forwarded to the next body for consideration. The committee will provide written rationale to the originator when a proposal is disapproved and the proposal is returned to the originator.
4. The Academic Senate considers the proposal and approves or disapproves. If approved, the proposal is forwarded to the Full Faculty for consideration. If the Academic Senate disapproves the proposal, the originator may request that the item be forwarded to the Full Faculty for consideration. The Academic Senate will provide written rationale to the originator when proposals are disapproved and the proposal is returned to the originator.
5. The Full Faculty considers academic senate approved proposals. If faculty approve, the proposal will then be forwarded to the Provost. The Provost approves or disapproves the proposal. If approved, the proposal is then forwarded to the Chancellor.
7. The Chancellor approves or disapproves the proposal.

Subcommittee and Academic Senate college representatives will notify their respective colleges' of the progress of submitted proposals or the proposal may be tracked via the web page --

<http://www.msun.edu/admin/provost/asproposals.htm>

Documentation and forms for the curriculum process is also available on the web page:

<http://www.msun.edu/admin/provost/asforms.htm>

\*\*\*\*\* (If a proposal is disapproved at any level, it is returned through the Academic Senate secretary to the Chair/Dean of the submitting college who then notifies the originator.)

Proposal # <u>02-15</u>	Title: <u>Biology Program Revisions</u>
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(proposal explanation, submitter and college chair/dean signatures on attached program/degree or course revision form)

Received by ACAD Senate Forwarded to Teacher Ed Council  Forwarded to Gen Ed Committee  Returned to ACAD Senate Forwarded to Curriculum Committee  Returned to ACAD Senate for Vote  Sent to Provost's office for Full Faculty vote Voted on at Full Faculty meeting  Forwarded to Provost for Approval/Disapproval <i>see attached memo.</i>  Forwarded to Chancellor for Approval/Disapproval  Copies sent to originating college and registrar's office C:/data/proposaltracking sheet ACAD 10 10 01	Date <u>12/16/02</u>  <u>NA</u>  <u>12/18/02</u> <u>12/18/02</u>  <u>1/21/03</u>  <u>1/27/03</u>  <u>1/31/03</u>  <u>2/24/03</u>  <u>2/26/03</u>	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; text-align: center;">Approved _____</td> <td style="width: 50%; text-align: center;">Disapproved _____</td> </tr> <tr> <td style="border-top: 1px solid black; text-align: center;">Signature</td> <td style="border-top: 1px solid black; text-align: center;">Date</td> </tr> <tr> <td style="text-align: center;">Approved _____</td> <td style="text-align: center;">Disapproved _____</td> </tr> <tr> <td style="border-top: 1px solid black; text-align: center;">Signature</td> <td style="border-top: 1px solid black; text-align: center;">Date</td> </tr> <tr> <td style="text-align: center;">Approved _____</td> <td style="text-align: center;">Disapproved <u>1/14/03</u></td> </tr> <tr> <td style="border-top: 1px solid black; text-align: center;">Signature</td> <td style="border-top: 1px solid black; text-align: center;">Date</td> </tr> <tr> <td style="text-align: center;">Approved <u>1/21/03</u></td> <td style="text-align: center;">Disapproved _____</td> </tr> <tr> <td style="border-top: 1px solid black; text-align: center;">Signature</td> <td style="border-top: 1px solid black; text-align: center;">Date</td> </tr> <tr> <td style="text-align: center;">Approved _____</td> <td style="text-align: center;">Disapproved _____</td> </tr> <tr> <td style="border-top: 1px solid black; text-align: center;">Signature</td> <td style="border-top: 1px solid black; text-align: center;">Date</td> </tr> <tr> <td style="text-align: center;">Approved _____</td> <td style="text-align: center;">Disapproved <u>2/24/03</u></td> </tr> <tr> <td style="border-top: 1px solid black; text-align: center;">Signature</td> <td style="border-top: 1px solid black; text-align: center;">Date</td> </tr> <tr> <td style="text-align: center;">Approved _____</td> <td style="text-align: center;">Disapproved <u>2/25/03</u></td> </tr> <tr> <td style="border-top: 1px solid black; text-align: center;">Signature</td> <td style="border-top: 1px solid black; text-align: center;">Date</td> </tr> </table>	Approved _____	Disapproved _____	Signature	Date	Approved _____	Disapproved _____	Signature	Date	Approved _____	Disapproved <u>1/14/03</u>	Signature	Date	Approved <u>1/21/03</u>	Disapproved _____	Signature	Date	Approved _____	Disapproved _____	Signature	Date	Approved _____	Disapproved <u>2/24/03</u>	Signature	Date	Approved _____	Disapproved <u>2/25/03</u>	Signature	Date
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## PROGRAM/DEGREE REVISION FORM

EW \_\_\_ DROPPED \_\_\_ MAJOR REVISION X FOR INFORMATION ONLY \_\_\_

College Arts and Science Program Area Biology Date 12/11/02

Submitter Carol A. Reichenbach Chair/Dean Will Davis Date 12/17/02  
Signature Signature (indicates "college" level approval)

Please provide in the space below a "before and after" picture of the program with the changes in the program noted. Attach appropriate Course Revision Forms. Please indicate changes by shading the appropriate cells.

**Proposal:**

1. Correct clerical error in the total credits for the Biology program revision dated April 12, 2002, to read Total Credits: 108 not 114. Correct clerical error under the credit for BIOL 141 Cell Biology Lab to read 1 not 0.
2. Proposal to drop PHYS 232 Fundamentals of Physics II and PHYS 235 Fundamentals of Physics II Lab from the Biology program Common Science Core requirements and drop BIOL 322 Botany II from the Program Selective requirements.
3. Proposal to add BIOL 217 Microbiology as a Common Science Core to the Biology program and add BIOL 241 Anatomy and Physiology I, BIOL 242 Anatomy and Physiology II, BIOL 4XX Field Biology, BIOL 406 Molecular Biology Techniques, BIOL 460 Advanced Microbiology, NSCI 455 Undergraduate Research II to the program selective course list.

**PROPOSAL TITLE** Biology Program Revision

**OLD PROGRAM (4/02 Proposal)**

Course Prefix	#	Course Title	Credits	
			Fall	Spr.
		<b>Common Science Core (34 credits)</b>		
BIOL	140	Cell Biology	4	
BIOL	141	Cell Biology Lab	1	
BIOL	221	Botany I	3	
BIOL	222	Botany I Lab	2	
BIOL	348	Zoology	3	
BIOL	350	Zoology I Lab	2	
CHEM	121	General Inorganic Chemistry I	3	
CHEM	122	General Inorganic Chemistry II		3
CHEM	123	General Inorganic Chemistry I Lab	2	
CHEM	124	General Inorganic Chemistry II Lab		2
PHYS	231	Fundamentals of Physics I	3	
PHYS	232	Fundamentals of Physics II		3
PHYS	234	Fundamentals of Physics I Lab	2	
PHYS	235	Fundamentals of Physics II Lab		2
		<b>Required Courses (22 credits)</b>		
BIOL	314	General Ecology	4	
BIOL	468	Molecular Biology & Genetics	4	
CHEM	341	Organic Chemistry I	3	
CHEM	342	Organic Chemistry I Lab	2	
MATH	116	Statistics	3	
NSCI	301	Essence of Science	3	

**NEW PROGRAM**

Course Prefix	#	Course Title	Credits	
			Fall	Spr.
		<b>Common Science Core (34 credits)</b>		
BIOL	140	Cell Biology	4	
BIOL	141	Cell Biology Lab	1	
BIOL	217	Microbiology		4
BIOL	221	Botany I	3	
BIOL	222	Botany I Lab	2	
BIOL	348	Zoology	3	
BIOL	350	Zoology I Lab	2	
CHEM	121	General Inorganic Chemistry I	3	
CHEM	122	General Inorganic Chemistry II		3
CHEM	123	General Inorganic Chemistry I Lab	2	
CHEM	124	General Inorganic Chemistry II Lab		2
PHYS	231	Fundamentals of Physics I	3	
PHYS	234	Fundamentals of Physics I Lab	2	
		<b>Required Courses (22 credits)</b>		
BIOL	314	General Ecology	4	
BIOL	468	Molecular Biology & Genetics	4	
CHEM	341	Organic Chemistry I	3	
CHEM	342	Organic Chemistry I Lab	2	
MATH	116	Statistics	3	
NSCI	301	Essence of Science	3	
NSCI	450	Undergraduate Research I	3	

	450	Undergraduate Research I	3	
		<b>Program Selectives (12 credits)</b>		
BIOL	322	Botany II		4
BIOL	324	Entomology	3	
BIOL	334	Ornithology		3
BIOL	407	Freshwater Biology	3	
ESCI	310	Introduction to Paleontology	3	

Total Credits: 108

		<b>Program Selectives (12 credits)</b>		
BIOL	241	Anatomy and Physiology I	4	
BIOL	242	Anatomy and Physiology II		4
BIOL	324	Entomology		3
BIOL	334	Ornithology		3
BIOL	407	Freshwater Biology	3	
BIOL	4XX	Field Biology	4	
BIOL	406	Molecular Biology Techniques		3
BIOL	460	Advanced Microbiology	3	
NSCI	451	Undergraduate Research II		3
ESCI	310	Introduction to Paleontology	3	(Summer)

Total Credits 108

PLEASE NOTE: Students enrolling in this program may pay between \$5-\$40/semester in course fees. Those fees are in addition to tuition and other fees.

Additional instructional resources needed (including library materials, special equipment, and facilities). Please note: approval does not indicate support for new faculty or additional resources.

ACAD program degree revision form Revised: 10/10/01

\* student must take a total of 39 upper division credits selective/and electives. ~~12~~

## COURSE REVISION FORM

NEW X DROPPED \_\_\_\_\_ MAJOR REVISION \_\_\_\_\_ FOR INFORMATION ONLY \_\_\_\_\_

College Arts & Science Program Area Biology Date 12/11/02

Submitter  Chair/Dean  Date 12/17/02  
Signature Signature (indicates "college" level approval)

Please provide a brief explanation & rationale for the proposed revision(s):

Proposal to introduce BIOL 4XX, Field Biology, as a selective for the Biology program.

Please provide the following information:

**College:** Arts & Sciences

**Program Area:** Biology

**Date:** 12/09/02

**Course Prefix & No.:** BIOL 4XX

**Course Title:** Field Biology Methods

**Credits:** 4

**Required by:** All Biology majors

**Selective in:** Bachelors degree in Water Quality

**Elective in:** many degrees

**General Education:** none

**Lecture:**

**Lecture/Lab:** 4

**Contact hours lecture:** 3

**Contact hours lab:** 1

**Current Catalog Description (include all prerequisites):**

none

**Proposed or New Catalog Description (include all prerequisites):**

This course provides experience in using various ecological techniques to measure certain parameters of populations of organisms found in Montana. The course emphasizes careful observation and measurement and allows students to develop an understanding of using statistical methods and demographic data to interpret biological processes and population trends.

The course will include such topics as using taxonomic keys, reviewing and evaluating technical literature, habitat surveys, population census methods and others. Prerequisite: BIOL 151 or BIOL 314 or BIOL 348 or consent of the instructor.

**Course Outcome Objectives:**

The student will develop skills in applying both field and statistical methods in measuring and interpreting biological processes and trends in populations of select organisms.

**Additional instructional resources needed (including library materials, special equipment, and facilities). Please note: approval does not indicate support for new faculty or additional resources.** Minor equipment that will be purchased with lab fees.

TO: Larry Strizich  
FROM: Roger Barber *Roger Barber*  
RE: Revisions in the Biology Program  
DATE: February 24, 2003

I have reviewed the proposed changes in the biology program. And I have spent considerable time thinking about the effect of those changes. Reluctantly, I have decided that I cannot approve the revisions. The purpose of this memorandum is to tell you why.

Let me begin by stating that I think some of the changes are good, and I have no doubt that they strengthen the biology program as a consequence.

Unfortunately, those strengths are outweighed by the concerns I have with the proposed changes. My concerns are as follows:

--both the biology program and the general science, secondary education program were reviewed by the Montana Board of Regents in 2000 because of their low enrollments. Both programs "survived" that review, but only because the institution agreed to make the two programs as efficient and similar as possible. It probably doesn't need to be stated, but the alternative to survival was elimination.

--enrollments in the two programs have not increased significantly since 2000. In fact, at their current levels, they will almost certainly be reviewed again by the Board of Regents.

--the two programs were revised in 2000, to comply with the Board of Regents' decision. Following those revisions, both programs shared a common set of courses, called the science core, and an "almost common" set of program selectives.

--those similarities have been eliminated with the recent revisions in the biology degree. The common science core is gone; and the list of selective courses is markedly different. As a result, MSU-Northern's negotiated understanding with the Board of Regents and the Commissioner's office has been erased.

I would be happy to consider changes in the biology degree, but only when the general science, secondary education degree is part of those revisions. Any changes in the two programs must reflect the need for efficiency and similarity, whenever possible. That is the promise MSU-Northern made to the Board of Regents, in 2000, in order to hang on to those two degree programs. We must honor that promise as we make changes in either program.

The faculty in the science programs still have time to make changes in both degree programs before the school year is over. I would urge them to make those changes, since some of the changes in the biology program seemed logical. But I will reiterate the institution's promise one more time: both the biology degree and the education degree in general science must be as similar as possible. That means that revisions in one cannot be made without making changes in the other.

If you have any questions, I would be happy to try and answer them.

Cc: Will Rawn