### 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.

registrar's office

C/data/proposaltracking sheet ACAD 10 10 01

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 # Title: Revision in the General Science-Teaching Degree Program

(proposal explanation, submitter and college chair/dean signatures on attached program/degree or course revision form)

	<b>-</b> .		
Received by ACAD Senate Forwarded to Teacher Ed Council	4/3/03	Approved /	Disapproved
Forwarded to Gen Ed Committee		Signature Approved	Date Disapproved
Returned to ACAD Senate Forwarded to Curriculum Committee	4/2/03	Signature Approved	Disapproved
Returned to ACAD Senate for Vote	4/22/03	Signature Approved	Disapproved 2203
Sent to Provost's office for Full Faculty vote Voted on at Full Faculty meeting	42303	Approved	Disapproved 4 29 03
Forwarded to Provost for Approval/Disapprov	val MAY 18 200	Approved X	Disapproved 5/2/03
Forwarded to Chancellor for Approval/Disapp	oroval MAY 2 2 2003	Signature Approved Signature	Disapproved Date
Copies sent to originating college and		* 1	1

# PROCEDURAL SEQUENCE FOR ACADEMIC SENATE APPROVAL OF PROPOSALS

- 1. Submit all proposals to the Office of Academic Affairs.
- 2. The Senate President will log items and forward them to the appropriate Senate subcommittees.
- 3. The Senate subcommittee will send the proposal to the Senate.
- 4. Senate proposals will be considered by the Full Faculty.
- 5. If approved, the proposal will then be forwarded to the Vice Chancellor.

Proposals that require action to approve/disapprove/table or remand will be sent back to the Senate according to the monthly meeting schedule.

TITLE: Revision in the General Science-Teaching Degr	ee Program
SUBCOMMITTEE:	PROPOSAL #:
PROPOSAL:	

 This proposal is to add courses to the program selective list that mirrors those proposed in the new revision of the biology program and to remove classes from the General Science program no longer taught for the biology program.

Action Signatures: 44-03		Run Page	303
Submitter Date	College Chair/D	Dean / 1	Date
Committee Chair	Approve	Disapprove	Date
Committee Chair	Approve	Disapprove	Date
Faculty Senete President	Approve	Disapprove	Date
Provost/Senior Vice Chancellor for Academic Af	Approve	Disapprove	Date
Revised: 11/15/99			

NEW

DROPPED

MAJOR REVISION

X FOR INFORMATION ONLY

Submitter Mol Chair/Dea

signature Date 4-U

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

Please provide in the space below a "before & 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.

Bachelor of Science in Education Degree Teaching major in General Science No Minor Required

			Fall	Spr				SHMAN YEAR	Fall	Spr	
Courses	to b	e taken Fall/Spring Semester						e taken Fall/Spring Semester			
BIOL	140	Cell Biology	4			BIOL		Cell Biology		4	
BIOL	141	Cell Biology Lab	1			BIOL		Cell Biology Lab		1	
CHEM	121	General Inorganic Chemistry I	3			CHEM		General Inorganic Chemistry I		3	
CHEM	123	General Inorganic Chemistry I Lab	2			CHEM	123	General Inorganic Chemistry I Lab		2	
NGL	111	Written Communication I	3			ENGL	111	Written Communication I		3	
HTAN	112	College Algebra	3			MATH	112	College Algebra		3	
HEM	122	General Inorganic Chemistry II			3	CHEM	122	General Inorganic Chemistry II			3
HEM	124	General Inorganic Chemistry II Lab			2	CHEM	124	General Inorganic Chemistry II Lab			2
cis	110	Introduction to Computers			3	CIS	110	Introduction to Computers			3
NGL		Written Communication II			3	ENGL	112	Written Communication II			3
SPCH	141	Fundamentals of Speech OR			3	SPCH	141	Fundamentals of Speech OR			3
SPCH	142	Interpersonal Communication			3	SPCH	142	Interpersonal Communication			3
		Elective			3			Elective			3
TOTALS			16		17	TOTALS			1	6	17
:	SOP	HOMORE YEAR	Fall	Spr				HOMORE YEAR	Fall	Spr	r
Courses	to b	e taken Fall/Spring Semester						e taken Fall/Spring Semester		_	
BIOL	221	Botany I	3	ļ		BIOL		Botany I		3	
BIOL	222	Botany I Lab	2	!		BIOL	222	Botany I Lab		2	
EDUC	100	Foundations of Education	3	1		EDUC		Foundations of Education		3	
HPE		Principles of Health Education/Substance Abu	3	3		HPE	235	Principles of Health Education/Substance Abu	:	3	
PHYS		Fundamentals of Physics I	3	}		PHYS	231	Fundamentals of Physics I		3	
PHYS		Fundamentals of Physics I Lab	2			PHYS	234	Fundamentals of Physics I Lab		2	
EDPY		Introduction to Education Psychology			3	EDPY	215	Introduction to Education Psychology			3
					4	ESCI		Physical Geology			4
ESCI BUVE		Physical Geology  Fundamentals of Physics II			3	PHYS		Fundamentals of Physics II			3
PHYS		Fundamentals of Physics II			2	PHYS		Fundamentals of Physics II Lab			2
PHYS		Fundamentals of Physics II Lab			3	PSYC		Human Growth & Dvelopment			3
PSYC	205	Human Growth & Dvelopment			3	F310	200	Dist Reg Area A			3
TOTALS		Dist Req Area A	16	3	3 18	TOTALS		Dist 1984 Allea A	1	6	18
								WOR VEAR		0-	
		IOR YEAR	Fall	Spr	•			IIOR YEAR De taken Fall/Spring Semester	Fall	Spr	Г
		e taken Fall/Spring Semester	4			BIOL		General Ecology		4	
BIOL		General Ecology								3	
BIOL		Zoology	3			BIOL		Zoology		2	
BIOL		Zoology Lab	2			BIOL		Zoology Lab		1	
EDUC		Integrating Technology into Education	1			EDUC		Integrating Technology into Education			
ESCI	115	Foundations of Earth Science	4			ESCI	115	Foundations of Earth Science		4	
		Dist Req Area B	3					Dist Req Area B		چٰ	
		Electives	2	2				Electives	(	3	_
ESCI	315	General Hydrology			3	ESCI		General Hydrology			3
EDUC	300	Introduction to Curriculum Planning and Pract	tice		3	EDUC	300	Introduction to Curriculum Planning and Practi	ice		3
EDUC	445	Teaching Reading, Writing, and Critical.			2	EDUC	445	Teaching Reading, Writing, and Critical.			2
		Dist Reg Area B			3			Dist Req Area B			3
		Selective			3			Selective			3
TOTALS	3		19	•	14	TOTALS			1	19	14
	SEN	IIOR YEAR	Fall	Spi	r			IOR YEAR	Fall	Spi	r
Courses	s to t	e taken Fall/Spring Semester				Courses		be taken Fall/Spring Semester			
BIOL.	425	Methods of Teaching Secondary Science	2	2		BIOL		Methods of Teaching Secondary Science		2	
EDPY		The Education and Psychology of Exceptiona	3	3		EDPY	350	The Education and Psychology of Exceptional	ļ	3	
EDUC		Assessment in Education	2	2		EDUC	376	Assessment in Education		2	
EDUC		Advanced Practicum in Education	3			EDUC		Advanced Practicum in Education		3	
	755	Selective	3					Selective		3	
			3					Dist Req Area A		3	
		Dist Req Area A	3					Dist Req Area D		3	
EDUC	450	Dist Req Area D	3	,	12	EDUC	450	Secondary Teaching Practicum & Seminar		-	12
	450	Secondary Teaching Practicum & Seminar			12	EDUC	400	Coordary reading readicum a commu			
EDUC											
TOTALS	6		19	9	12	TOTALS	ì		1	19	12

Program	Selectives 12 Credits	Fall	Spr		Progran	n Selectives 12 Credits		Fall	Spr	
BIOL	322 Botany II			4	BIOL	217 Microbiology			Op,	4
BIOL	324 Entomology	;	3		BIOL	241 Anatomy & Physiology I	\$4.80	. 4		7
BIOL	334 Ornithology			3	BIOL	242 Anatomy & Physiology II	õ			A
BIOL	363 Lentic Ecology			3 Remove	BIOL	322 Botany II				4
BIOL	364 Stream Biology	o Bullion		3 from	BIOL	324 Entomology		3		4
BIOL	455 Phycology		1	3 program	BIOL	334 Ornithology		3		2
BIOL	468 Molecular Biology & Genetics		4	,	BIOL	407 Freshwater Biology		2		J
ESCI	310 Introduction to Paleontology	;	3		BIOL	4XX Field Biology		3		
					BIOL	406 Molecular Biology Tecniques		-		3
					BIOL	460 Advanced Microbiology		3		
					NSCI	450 Undergraduate Research I	Park	3		
					NSCI	451 Undergraduate Research II	Berger F			3
					ESCI	310 Introduction to Paleontology	Part of the Part o	3		•

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#### COURSE REVISION FORM

NEW X DROPPED	MAJOR REVISIO	NFOR INF	ORMATION C	ONLY
College Arts & Science	Prpgram Area <u>Biology</u>	and General Science	ce Secondary Ec	ducation Date 04/02/03
Submitter Mol A. Ves	Chair/Dean	Will R	Zaen	Date 4-4-03
Signature	Sig	gnature (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 and General Science Secondary Education programs. Mugural included w/BioDogy program revisions proposal 02-37

Please provide the following information:

College: Arts & Sciences

Program Area: Biology and General Science Secondary Education

**Date:** 12/09/02 **Resubmitted**: 04/02/03 Course Prefix & No.: BIOL 4XX

Course Title: Field Biology Methods

Credits: 4

Required by:

Selective in: BS degree Biology and BS degree General Science Secondary Education

many degrees Elective in: 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.