ACADEMIC SENATE PROPOSAL TRACKING SHEET

(Document To Be Originated by the Academic Senate Secretary On Canary Color Paper)

Proposal # 23-12 Title: New Course Proposal - BIOB 171

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

All proposals MUST have their originating college faculty body (Arts, Sciences & Education; Health Sciences; Technical Sciences) approval and must be signed by the submitter and the college 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 or General Education Inclusion form) to the Academic Senate Secretary. NOTE: Level 1 or Level 2 forms must be submitted concurrent with this proposal where applicable. For Education proposals, PEU approval must be received prior to forwarding the proposal to the Senate.
- 2. The Academic Senate Secretary logs and numbers items and forwards them to the appropriate Academic Senate subcommittee(s): General Education (if applicable), or Curriculum. A digital copy of the proposal will be linked on the Academic Senate Proposal page by the Academic Senate Secretary.
- 3. The Academic Senate subcommittee(s) consider(s) the proposal. If approved, the proposal is returned to the Academic Senate Secretary for forwarding to the next committee. If a committee disapproves the proposal, the committee will provide written rationale to the originator, via the Academic Senate.* The originator may request that the item be forwarded to the next body for consideration. Upon completion of subcommittee action, the proposal will be returned to the Academic Senate Secretary for consideration at the next Academic Senate meeting.
- 4. The Academic Senate considers the proposal and recommends approval or disapproval. If approved, the proposal is forwarded to the Provost for consideration within 10 working days. If the Academic Senate disapproves the proposal, the Academic Senate will provide written rationale to the originator. * The originator may request that the item be forwarded to the Full Faculty for consideration, utilizing procedures set forth in the Senate Bylaws.
- 5. Approved proposals will be forwarded to the Provost. The Provost approves or disapproves the proposal. If approved, the proposal is then forwarded to the Chancellor. From this point forward, the Provost's Administrative Assistant will update the Proposal page on the website by contacting the webmaster.
- 7. The Chancellor approves or disapproves the proposal.
- 8. If approved, the proposal will then either be implemented or referred to MSU for further action. The tracking page on the Provost site will be updated as required.

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/senate/proposals.htm

Documentation and forms for the curriculum process are also available on the web page: http://www.msun.edu/admin/provost/forms.htm

^{*} If a proposal is disapproved, it is returned to the Dean of the submitting college who then notifies the originator.

	Date	Action Taken	Signature	Date	Comments/Reason for Disapproval	Sent to	Date	Transmittal E-mail sent
Received by Senate Secretary	12/1/2023	Tracking form initiated	Britany Garden	12/1/2023	Sent to Curriculum C	ommittee	12/1/202	3 DocuSign
General Education Committee (if applicable)		☐ Approved ☐ Disapproved	7101000101000					
Curriculum Committee (if 1/4 applicable)	4/2024	☑ Approved☐ Disapproved	Casy Donoven	1/4/2024	Passed - Forward to Academic Senate			
Academic Senate	1/12/2024		Valerie Guyant	1/12/2024				
Provost	0/22/24	Approved Disapproved	MATA DAIN	1/22/29				
Chancellor	1-26-2024	Approved Disapproved	Larry D Kagel	1-26.2024		Pywost	1-29-24	
			0 // 1	/				
MSU		☐ Approved ☐ Disapproved						
BOR		☐ Approved ☐ Disapproved						
NWCCU		☐ Approved ☐ Disapproved						
Provost		Advise originating college and Academic Senate of status. Update Web page.						
Registrar		Catalog/Policy Manual Update						

NOTE: The secretary of the Academic Senate will update the Academic Senate Proposal web page from initial receipt until the proposal reaches the Provost. The Provost's Administrative Assistant will ensure that the current status of each proposal is maintained on the Academic Senate Proposal web page from that point forward.

Academic Senate Form 1 (Revised 4/4/2023)

COURSE REVISION FORM

NEW X DROPPED MAJO	OR REVISION	FOR INFORMATION ONLY	
 For purposes of this form, "For Information On 	ly" should be used for catalo	g description or objective changes ONLY	
College Arts, Sciences & Education	Program Area	Biology (B65)	
Submitter Heldelmand, Ph 2	DeanSignatur	Date	_

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

The Biology Program seeks to more closely tailor its course requirements with other state universities. This course is a co-requisite for the newly proposed BIOB 170 (Organismal Diversity and Evolution Lecture) and represents more current preparation for students that seek a B.S. or minor in Biology.

Course Prefix & No.: BIOB 171

Current Course Title:

Proposed Course Title (when applicable): Organismal Diversity and Evolution Lab

Current # of Credits:

Proposed # of Credits (when applicable): 1

[please specify degrees]:

Required by: Biology Major and Minor

Selective in: Elective in:

General Education Category:

Lecture:

Lecture/Lab: Gradable Lab: 1

Lecture contact hours per week: Lab contact hours per week: 2

Current Catalog Description (include all prerequisites):

Proposed or New Catalog Description (include all prerequisites):

A course for biology majors and minors, as well as students who plan to take additional courses in biology. This course accompanies BIOB 170 Organismal Diversity and Evolution Lecture. The objective of the lab is to introduce students to the diversity of life and how it evolved. It provides students with fundamental knowledge of organismal structure and function of Earth's organisms. Integrated topics include anatomy, physiology, development, and mechanisms of evolution. Prerequisites: BIOB 160/161 Principles of Living Systems Lecture and Lab. Corequisite: BIOB 170 Organismal Diversity and Evolution Lecture

Course Outcomes/Objectives: Students will

- 1. Apply the scientific method to test hypotheses.
- 2. Explore the diversity of extant organisms.
- 3. Understand the relationship between organismal form and function.
- 4. Become familiar with systematics and phylogeny construction.
- 5. Learn taxonomy and the processes required to develop a taxonomic key.
- **6.** Understand natural selection as an evolutionary mechanism that leads to speciation.

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

A need for additional instructional resources is not anticipated.

The true laboratory is the mind, where behind illusions we uncover the laws of truth.

ORGANISMAL DIVERSITY & EVOLUTION SYLLABUS BIOB 171 Lab: T 8:00 – 9:50 AM Hagener Science Center 215

INSTRUCTOR INFORMATION

Terri Hildebrand, Ph.D.

Office hours: MWF -- 11:00 AM - 12:00 PM

T -- 1:00 - 3:00 PM

terri.hildebrand@msun.edu

Office: HSC 205

Phone: (406) 265-3700 ext 3329 (office)

< 60%

(435) 868-8800 (mobile)

COURSE INFORMATION

Prerequisites:

BIOB 160/161 Principles of Living Systems Lecture & Laboratory

Corequisites:

BIOB 170 Organismal Diversity & Evolution Lecture

Textbook:

None required

Description:

A course for biology majors and minors, as well as students who plan to take additional courses in biology. This course accompanies BIOB 170 Organismal Diversity and Evolution Lecture. The objective of the lab is to introduce students to the diversity of life and how it evolved. It provides students with fundamental knowledge of organismal structure and function of Earth's organisms. Integrated topics include anatomy, physiology, development, and mechanisms of evolution.

Learning

Outcomes: Students will

- 1. Apply the scientific method to test hypotheses.
- 2. Explore the diversity of extant organisms.
- 3. Understand the relationship between organismal form and function.
- 4. Become familiar with systematics and phylogeny construction.
- 5. Learn taxonomy and the processes required to develop a taxonomic key.
- 6. Understand natural selection as an evolutionary mechanism that leads to speciation.

Teaching

Philosophy:

Students in laboratory courses take an active, hands-on role in learning. Student must come to each lab session prepared, ready to engage in exercises with their fellow students. Weekly tests and practical exams cover concepts as well as material viewed in lab sessions. I strive to make this course valuable, informative, and enjoyable. Throughout the semester, I encourage discussion of comments or ideas about course content and organization. Because I believe all students have an equal right to learn, any behavior that disrupts the class or creates an environment hostile to learning will not be condoned. Please respect the rights of others in the class.

EVALUATION

Students are assessed using practical exams, weekly exams, and lab exercises. These contribute to each grade as follows:

Practical Exams – 100 points each, 2 exams	200
Weekly Exams – 11 @ 20 points each	220
Lab Exercises – 12 @ 20 points each	240

Grading Scale

Λ.	1000/	۸	95-99%	A-	90-94%	
A+	100%	А		5.5	AVENUE PROCESSOR	
B+	87-89%	В	84-86%	B-	80-83%	
C+	77-79%	С	74-76%	C-	70-73%	
D+	67-69%	D	64-66%	D-	60-63%	

The true laboratory is the mind, where behind illusions we uncover the laws of truth.

Practical Exams: Midterm and final practical exams cover material presented in laboratory exercises completed to the exam date. They include the identification of structures, specimens and other topics covered in previous labs.

Weekly Exams: An exam is given each week at the start of the lab (except for the first week and the week following the midterm practical exam). Each weekly exam covers material from the previous lab as well as one – two questions on the current laboratory exercise.

Lab Exercises: Each week students complete a laboratory exercise. Lab exercises are posted on Bright Space each week. It is the responsibility of students to print and bring exercises to their lab sessions.

BRIGHTSPACE

This course uses the Brightspace learning system for course management. It is your responsibility to log onto Brightspace at www.msunonline.org and become familiar with the program during the first week of class. The most recent browser version of Google Chrome or Microsoft Edge is recommended for Brightspace use. Internet Explorer is NOT supported and will lead to issues. Brightspace is useable over a 56K modem; however, the faster & more reliable your Internet connection speed, the better the experience. The Brightspace login page has a link for you to run a system check.

ATTENDANCE POLICY

I have high expectations for my students, and I want them to succeed in understanding and applying the material presented in the course. The *primary* strategy for success in this course is communication, including the exchange of ideas with others in the class as well as consultations with the instructor. Attendance and participation are highly encouraged. If you cannot attend a class, please let me know in advance. You are responsible for getting a copy of the notes for the missed class. If you become ill or the victim of an emergency, let me know prior to the class meeting and accommodations may be made at my discretion.

STUDENT RESPONSIBILITIES

- Behave in a courteous and respectful manner toward the professor and fellow students. Inappropriate comments (e.g., racial or gender slurs) WILL NOT BE TOLERATED.
- Show up to class on time.
- Turn off cell phones during class. A cell phone present during an exam immediately results in a zero. I will confiscate phones if they are used (including texting) during class.

ACADEMIC INTEGRITY

Academic integrity is a central value in higher education. It rests on two principles: first, that academic work is represented truthfully as to its source and its accuracy, and second, that academic results are obtained by fair and authorized means. "Academic misconduct" occurs when either of these principles is knowingly violated.

The responsibility of academic integrity does not rest solely in the hands of the faculty and administration. It depends also on the attitude and spirit of the student body to create an atmosphere that promotes strong integrity. In other words, the students determine a school's level of character. The job of educators is to foster and encourage a feeling of honesty and quality. In this class, the concept of individual honor is designed to promote mutual trust and respect between students and faculty.

Examples of student academic misconduct include giving or receiving unauthorized assistance on examinations or in the preparation of notebooks, themes, reports, or other assignments; knowingly misrepresenting the source of any academic work; changing grades without authorization; forging signatures; or plagiarizing another's work. Students who are found guilty of academic misconduct are subject to a range of disciplinary actions, including suspension or dismissal. Instructors also are expected to abide by the principles of academic integrity and may be sanctioned for academic misconduct.

RESOURCES FOR STUDENTS

Accessibility Statement: As directed by Section 504 of the Rehabilitation Act and the Americans with Disability Act (ADA), any students with physical or learning disabilities have access to a variety of services at MSU-Northern. In order to access these services, students are encouraged to meet with the Accessibility Resource Coordinator, Johnna Antonich. During the meeting the student will complete an application, provide documentation of their disability (an IEP from high school, any Veteran or DV, and/or clinical documentation from a licensed professional), and complete accommodations request forms for their courses.

The true laboratory is the mind, where behind illusions we uncover the laws of truth.

Johnna Antonich, Coordinator of Accessibility Resources Cowan Hall 213C, (406) 265-3533 johnna.antonich@msun.edu

Veterans Statement: Veterans, Drilling Guard/Reserve Members, and active duty military personnel with special circumstances (e.g., upcoming deployments, drill requirements, disabilities) are welcome and encouraged to communicate these, in advance if possible, to the instructor. The MSU-Northern Office of Veteran Services is committed to serving all the needs of our veterans and assisting them during their transition from military life to that of a student. If you are a student veteran or veteran dependent and need any assistance with your transition, please contact Joshua Gomez, the coordinator of Veteran Services at MSU-Northern.

Katelyn Springer, Veterans Services Coordinator Cowan Hall 220, 406.265.4190 katelyn.springer@msun.edu

Inclusivity Statement: I support an inclusive learning environment where diversity and individual differences are understood, respected, appreciated, and recognized as a source of strength. I expect that students, faculty, administrators and staff at MSUN will respect differences and demonstrate diligence in understanding how other peoples' perspectives, behaviors, and worldviews may be different from their own.

Tutoring Central: Tutoring Central offers professional and peer tutors in a wide range of disciplines, all approved by MSUN faculty. To request tutoring, please visit www.msun.edu/tutoring/index.aspx to schedule a tutoring appointment or e-mail tutoring@msun.edu and you will be placed with a tutor who specializes in your requested subject area.

Brightspace Technical Support: This course uses the Brightspace Learning Management System for course content, communication, and grading. Email brightspace@msun.edu or contact Jason Geer or Brittany Garden in the Office of Teaching & Learning Excellence for Brightspace support.

Jason Geer Cowan Hall 104, 265-3767 Jason.geer@msun.edu Brittany Garden Cowan Hall 104, 265-3701 Brittany.garden@msun.edu

INFORMATION CONTAINED IN THIS SYLLABUS MAY BE SUBJECT TO CHANGE WITH ADVANCE NOTICE AS DEEMED APPROPRIATE BY THE INSTRUCTOR.

TOPICS

This class consists of the following weekly laboratory topics:

- 1. Scientific Method
- 2. Natural Selection; Speciation, Dichotomous Keys
- 3. Systematics
- 4. Protist Diversity
- 5. Plant Structure & Anatomy
- 6. Plant Physiology & Growth



- 7. Plant Diversity I
- 8. Plant Diversity II
- 9. Fungal Diversity
- 10. Animal Form & Function (Rat Dissection)
- 11. Animal Diversity I
- 12. Animal Diversity II

"The true laboratory is the mind, where behind illusions we uncover the laws of truth."