ACADEMIC SENATE PROPOSAL TRACKING SHEET

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

Proposal # 23-13	Title: BIOB 420 - Evolution to be Designated as Capstone (For Information Only)

(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.**

See back for tracking form

	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	DocuSigned by: Brittany Garden 7131CC9454D9458	12/1/2023	Sent to Curriculum Committee		12/1/2023	DocuSign
General Education Committee (if applicable)		☐ Approved ☐ Disapproved						
Curriculum Committee (if applicable)	1/4/2024	☒ Approved ☐ Disapproved	DocuSigned by: Casey Donovan	1/4/2024	Passed - Forward to Academic Senate			
Academic Senate	1/12/2024	☒ Approved ☐ Disapproved	DocuSigned by: Valerie Guyant	1/12/2024				
Provost	1/22/24	☒ Approved ☐ Disapproved		1/22/24				
Chancellor	1/26/2024	☒ Approved ☐ Disapproved		1.26.2024		Provost	1-29-24	
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.

COURSE REVISION FORM

NEW ____ DROPPED ____ MAJOR REVISION ____ FOR INFORMATION ONLY **X**

- For purposes of this form, "For Information Only" should be used for catalog description or objective changes ONLY

College **Arts, Sciences & Education** Program Area **Biology (B65)**

Submitter Jeri Hildebrand Ph D Dean _____ Date _____

Signature Signature (indicates "college" level approval)

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

The Evolution course (BIOB 420) is the final program course for students that pursue a B.S. or minor in Biology. The course topic links all previous biology courses as well as knowledge and experience that students gain in non-biology courses. This course is currently not listed as a capstone course. **This revision seeks to have the Evolution course designated as a capstone course. This revision also adds Molecular Biology and Genetics (BIOB 485/486) as prerequisites for the course.**

Course Prefix & No.: BIOB 420
Current Course Title: Evolution
Proposed Course Title (when applicable):
Current # of Credits: 4
Proposed # of Credits (when applicable):
[please specify degrees]:
Required by: Biology Major and Minor
Selective in:
Elective in:
General Education Category:
Lecture: 4
Lecture/Lab:
Gradable Lab:
Lecture contact hours per week: 4
Lab contact hours per week:
Current Catalog Description (include all prerequisites):
This course provides a comprehensive introduction to modern evolutionary biology, which explains the unity and diversity of life. This integrative course synthesizes principles from molecular, cellular, and organismal biology in an analysis of biological diversity in the context of evolutionary patterns and processes. Class periods include lecture/seminar, group activities, and discussion of journal articles from the primary literature. A literature review and research paper using peer-reviewed primary literature is required. Prerequisites: BIOB 160, BIOB 161.

Proposed or New Catalog Description (include all prerequisites): This integrative **capstone** course synthesizes principles from molecular, cellular, and organismal biology in an analysis of biological diversity in the context of evolutionary patterns and processes. Considered are the history of evolutionary thought, molecular evolution, population and quantitative genetics, selection and adaptation, as well as speciation. Emphasis is on how scientists' study and document change over time in natural populations, the methods used in testing evolutionary hypotheses, and how discovering evolutionary mechanisms at one organizational level may help illuminate processes in the natural world. Prerequisites: BIOB 485/485 Molecular Biology and Genetics Lecture and Lab

Course Outcomes/Objectives: Students will

1. Understand the history of evolutionary theory.
2. Defend the role of evolutionary theory in our understanding of biology, geology, and other fields of science.
3. Identify and describe the mechanisms that lead to evolution in populations.
4. Understand and cite specific evidence that supports evolutionary theory.
5. Apply mathematical approaches that elucidate processes of evolution.
6. Compare and distinguish peer-reviewed literature and interpret charts and statistics.
7. Interpret the scientific method as it applies specifically to evolutionary research.
8. Understand and implement the peer-review process.

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.