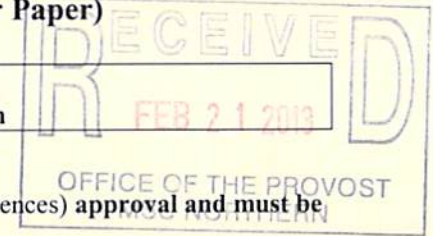


**ACADEMIC SENATE PROPOSAL TRACKING SHEET**  
(Document To Be Originated By the Academic Senate Secretary On Canary Color Paper)

<b>Proposal #12-17</b>	<b>Title: BIOM 250/251 Microbiology for Health Sciences &amp; Lab – Major Revision</b> (Proposal explanation, submitter and college dean signatures on attached program/degree or course revision form.)
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**All proposals MUST have their originating college faculty body (Ex. Arts & Sciences, Education and Nursing; 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 transmittal e-mail will be sent to the Recording Secretary of the receiving committee, cc Provost's Administrative Assistant, by the Academic Senate Secretary. 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 originator may request that the item be forwarded to the next body for consideration. The committee will provide written rationale to the originator, via the Academic Senate, when a proposal is disapproved and the proposal is returned to the originator. Upon completion of committee action, the proposal will be returned to the Academic Senate Secretary, and a transmittal e-mail sent by the Committee Recorder to the Senate Secretary, cc Provost's Administrative Assistant.
4. The Academic Senate considers the proposal and recommends approval or disapproval. If approved, the proposal is forwarded to the Provost for consideration. If the Academic Senate disapproves the proposal, the originator may request that the item be forwarded to the Full Faculty for consideration, utilizing the procedures set forth in the Senate Bylaws. The Academic Senate will provide written rationale to the originator when proposals are disapproved and the proposal is returned to the originator.
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. 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 is also available on the web page:**  
<http://www.msun.edu/admin/provost/forms.htm>

**\*\*\*\*\* (If a proposal is disapproved at any level, it is returned through the Academic Senate secretary and the Senate President, 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
*Abstract received by Senate Secretary		Copy to Senate President. Forward to Provost.						
*Provost		<input type="checkbox"/> Abstract Approved <input type="checkbox"/> Disapproved						
Received by Senate Secretary	11/08/12	Tracking form initiated				Gen Ed	11-13-12	11-13-12
General Education Committee (if applicable)	11/13/12	<input checked="" type="checkbox"/> Approved <input type="checkbox"/> Disapproved	<i>[Signature]</i>	11-15-12		Senate	11-19-12	11-20-12
Curriculum Committee (if applicable)	11-20-12	<input checked="" type="checkbox"/> Approved <input type="checkbox"/> Disapproved	<i>[Signature]</i>	1-16-13		Senate	1-16-13	
Academic Senate	01-17-13	<input type="checkbox"/> Approved <input type="checkbox"/> Disapproved	<i>[Signature]</i>	2/14/13		Provost	2-21-13 <del>2-15-13</del>	2-15-13
Full Faculty (if necessary)		<input type="checkbox"/> Approved <input type="checkbox"/> Disapproved						
Provost		<input checked="" type="checkbox"/> Approved <input type="checkbox"/> Disapproved	<i>Rosalyn Christine Tompkins</i>					
Chancellor		<input checked="" type="checkbox"/> Approved <input type="checkbox"/> Disapproved	<i>[Signature]</i>	2-25-13				
MSU		<input type="checkbox"/> Approved <input type="checkbox"/> Disapproved						
BOR		<input type="checkbox"/> Approved <input type="checkbox"/> Disapproved						
NWCCU		<input type="checkbox"/> Approved <input type="checkbox"/> 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.

**\*Abstract and pre-approval required for new programs ONLY.**

Academic Senate Form 1 (Revised 3/21/2012)

## COURSE REVISION FORM

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

College CEASN Program Area Science Date 9/24/12

Submitter Candace Raphael Dean [Signature] Date 10-15-12  
Signature Signature (indicates "college" level approval)

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

This proposal is to take BIOM 250/251 Microbiology for Health Sciences where the laboratory portion is integrated in with the lecture portion and separate the laboratory portion out. In recent years many of the pre-nursing students have taken the lecture portion elsewhere and just need the laboratory portion to be eligible for the nursing program.

Please provide the following information:

**College:** CEASN  
**Program Area:**  
**Date:**  
**Course Prefix & No.:** BIOM 250/251  
**Course Title:** Microbiology for Health Sciences  
**Credits:** 4  
**Required by:**  
**Selective in:** Biology/General Science  
**Elective in:**  
**General Education:** Category III

**Lecture:** NEW: 3 credits for 250  
**Lecture/Lab:** old: 4  
**Gradable Lab:** NEW: 1 credit for 251 (see proposal)  
**Contact hours lecture:** 3 hours/week  
**Contact hours lab:** 2 hours/week

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

A survey of the microbial world including bacteria, viruses, protozoa, algae, and fungi, relationships of microorganisms to man and to the environment including health and disease, cultivation, isolation, microbial metabolism and genetics, with an emphasis on antisepsis and medical microbiology for students entering health related fields as well as applied microbiology related to water quality. Appropriate for students in general education and science and health related programs. Includes lecture and laboratory hours. Recommend: high school biology or BIOC 160 (BIOL 140). This course does meet the laboratory science requirement.

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

**BIOM 250:** This course provides a survey of the microbial world including the organisms included in the group making up microorganisms and the relationship of microorganisms to humans. The course presents the fundamental concepts of cellular structure, metabolic functions, genetics and control of microbial growth.

### Course Outcome Objectives:

**BIOM 250:** Students that successfully complete this course will have a background in general prokaryote structure, cellular metabolic processes – including energy production, growth processes, processes used for controlling growth of microorganisms – including antibiotic use, and the process of prokaryote reproduction.

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

Updated 09/29/05

## COURSE REVISION FORM

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

College CEASN Program Area Science Date 9/24/12

Submitter Carol A. Lepley Dean [Signature] Date 10-15-12  
Signature Signature (indicates "college" level approval)

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

This proposal is to take BIOM 250/251 Microbiology for Health Sciences where the laboratory portion is integrated in with the lecture portion and separate the laboratory portion out. In recent years many of the pre-nursing students have taken the lecture portion elsewhere and just need the laboratory portion to be eligible for the nursing program.

Please provide the following information:

College: CEASN

Program Area:

Date:

Course Prefix & No.: BIOM 251

Course Title: Microbiology for Health Sciences Laboratory

Credits: 1

Required by:

Selective in: Biology/General Science

Elective in:

General Education:

Lecture:

Lecture/Lab:

Gradable Lab: 1 credit

Contact hours lecture:

Contact hours lab: 2 hours/week

Current Catalog Description (include all prerequisites):

No current catalog description.

Proposed or New Catalog Description (include all prerequisites):

**BIOM 251:** This course is the laboratory course that accompanies BIOM 250. Students will be introduced to and use the basic skills necessary for isolating, culturing, and identifying bacteria in the laboratory setting. Students should be co-enrolled in BIOM 250 or have taken BIOM 250 previously. This course does meet the laboratory science requirement.

Course Outcome Objectives:

**BIOM 251:** This course will provide students with the opportunity to learn and utilize basic microbiological laboratory skills used for isolation, culturing and identification of bacteria. The student will have the opportunity to fully use these skills in the identification of an unknown as a final laboratory project.

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



**Request for Inclusion in the General Education Core**

Add to Category	Gen Ed Category	Area Description	Credits Required
	Category I	Communication	6
	Category II	Mathematics	3
XX	Category III	Natural Sciences with lab	6
	Category IV	Social Sciences/History	6
	Category V	Cultural Diversity	3
	Category VI	Fine Arts/Humanities	6
	Category VII	Technology	3

**Course submitted for consideration:**

College	Subject	Number	Title	Credits
CEASN	BIOM	251	Microbiology for Health Sciences Laboratory	1

**Catalog Description:**

This course is the laboratory course that accompanies BIOM 250. Students will be introduced to and use the basic skills necessary for isolating, culturing and identifying bacteria in the laboratory setting. Students should be co-enrolled in BIOM 250 or have taken BIOM 250 previously. This course does meet the laboratory science requirement.

**Provide a detailed explanation; show evidence, and rationale meeting 80% of the objectives as directly related to the appropriate category I through IX for the proposed course inclusion.**

<p><b>The students that take this course are introduced to the Scientific Method in the second experiment.</b></p> <p><b>The experiments utilized in this course center on developing the student's skills of observation and use of critical thinking.</b></p> <p><b>The final project of the course is the Unknown project where students are given a culture of two bacterial organisms. They must utilize techniques developed over the course of the class to separate the cultures, develop them into pure cultures, inoculate the cultures into different media, assess their observations and results and determine the identity of the unknown organisms. The organisms that are used are from the natural environment, whether from the soil or part of the normal flora of the human body.</b></p> <p><b>The students are assessed on basic knowledge of the material (exams), their ability to critically think, assess and conclude (lab reports and unknown report) and to develop laboratory skills illustrated by their technique to perform them (technique).</b></p> <p><b>Thus, this course meets the objectives for Category III – Natural Science.</b></p>	
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Print Name	Print Name	
Submitter <i>Carol A. Reinhold</i>	Chair/Dean: <i>Christina Curran</i>	Date: <i>11/7/12</i>
<b>Signature</b>	<b>Signature (indicates "college" level approval)</b>	