For Academic Affairs and		
Research Use Only		
Proposal Number		
CIP Code:		
Degree Code:		

# **PROGRAM MODIFICATION FORM**

[ ] Undergraduate Curriculum Co	ouncil		
[X] Graduate Council			
Modification Type: [ ]Admissions, [X]Curricular Sequence, or [ ]Other			
Signed paper copies of proposals sub name and enter date of approval.	mitted for conside	eration are no longer required. Please ty	pe approver
Virginie Rolland  Department Curriculum Committee Cha	3/13/2023 air	COPE Chair (if applicable)	ENTER DATE
Stephen J. Mullin <b>Department Chair</b>	3/13/2023	Head of Unit (if applicable)	Enter date
John Hershberger College Curriculum Committee Chair	3/28/2023	Undergraduate Curriculum Council Chai	Enter date
Mary Elizabeth Spence Office of Accreditation and Assessment impacting assessment)	3/28/2023 (only for changes	Graduate Curriculum Committee Chair	Enter date
Jennifer L. Bouldin College Dean	3/31/2023	Len Frey_ Vice Chancellor for Academic Affairs	5/2/2023
General Education Committee Chair	ENTER DATE (if applicable)		

**1. Contact Person** (Name, Email Address, Phone Number) Than Boves, tboves@astate.edu, 870-972-3320

2. Proposed Change (for undergraduate curricular changes please provide an 8-semester plan (appendix A), if applicable)

For the MS Biology Program, we are proposing to remove the stand-alone Comprehensive Exam of knowledge and instead, incorporate this step into another event within the Program timeline (Thesis Defense). We also propose to codify the inclusion of a Preliminary Exam within the current Program timeline (Proposal Defense). In addition, we would adjust Program Requirements by removing Form (7) and reordering the sequence of the subsequent forms (moving Form 8 to the end of the sequence) to reflect these changes. The current forms can be found here: Documents (astate.edu).

Below is the text that we would like added to the Bulletin (under Program Requirements).

"Each student will be required to complete, under the advisement of a graduate faculty member, a research thesis, that will also be approved by their thesis advisory committee (consisting of at least three approved graduate faculty members). A thesis proposal must be defended in a public seminar, scheduled no later than the end of the third semester of the student's tenure in the program, and at least one semester before the student defends the thesis. During the student's thesis proposal defense, a Preliminary Exam of knowledge will also be administered by the student's advisory committee. The outcome of this Exam can be: (i) pass, (ii) conditional pass with deficit, or (iii) fail. If the thesis committee identifies deficits in the student's understanding of general biology knowledge at that time, the committee will provide guidance and make requirements of the student to address those gaps. If the student fails to adequately address concerns as determined by their advisory committee, the student will be dismissed from the program.

When the student and their faculty advisor have determined that their written thesis is adequately prepared, the student must present their work to the public and defend it to their committee. During this time, a Comprehensive Exam of knowledge of biological content will also occur, conducted by members of the student's advisory committee. The outcome of this exam can be: (i) pass, (ii) conditional pass with deficit, or (iii) fail. If the committee's decision is conditional pass, the student will have up to 8 weeks to remedy the identified deficits in content knowledge through methods advised by the committee. Within that period of time, the thesis committee will convene again to re-examine the student. The outcome of this retake of the Comprehensive Exam is either pass or fail. A student who fails their second attempt of the Comprehensive Exam will not be eligible for the degree, and will be dismissed from the program."

#### 3. Effective Date

8/15/2023

#### **4. Justification –** *Please provide details as to why this change is necessary.*

These changes are necessary because currently the Graduate Bulletin provides very little information about requirements to complete a Master's degree in Biology, beyond coursework. The removal of the stand-alone Comprehensive Exam (found only via Forms listed on the Biological Sciences website) is in the best interest of the students and the program because this requirement is of limited value to students and at best, presents an obstacle to research focus and completion of their degree; there would be greater value in student time spent on their research than preparing for another exam. Second, these current exams are administered in extremely inconsistent manners (in terms of length, format, and number of exams). In total, this exam fails to provide an effective assessment of student mastery in their discipline, and thus should be removed. Finally, removal of the stand-alone Comprehensive Exams in our Biology Master's program will be consistent with most Biology Master's programs at aspirant and peer research institutions in the country.

## **Bulletin Changes**

#### **Instructions**

Please visit <a href="http://www.astate.edu/a/registrar/students/bulletins/index.dot">http://www.astate.edu/a/registrar/students/bulletins/index.dot</a> and select the most recent version of the bulletin. Copy and paste all bulletin pages this proposal affects below. Please include a before (with changed areas highlighted) and after of all affected sections.

\*Please note: Courses are often listed in multiple sections of the bulletin. To ensure that all affected sections have been located, please search the bulletin (ctrl+F) for the appropriate courses before submission of this form.

Because the AY22-23 version of the Graduate Bulletin is not available in .pdf format, it is impossible to cut/paste pages that would accurately reflect the changes. The concerned sections of the <u>Biology</u>, <u>MS webpage</u> within the online Bulletin is presented below in its current version, followed by the version with the needed insertions/changes.

#### **BEFORE:**

## **ADMISSION REQUIREMENTS**

Students seeking admission into the Master of Science degree program in Biology must meet the admission requirements of Graduate Admissions and the specific program requirements.

In addition, applicants for the M.S. program in Biology will be evaluated by the department for academic qualification based upon their undergraduate academic record, score on the Graduate Record Examination, and letters of reference. Specific requirements include:

- 1. A minimum of 18 undergraduate hours in the biological sciences and an undergraduate grade point of 2.75 or greater (on a 4.0 scale). Students judged to be deficient in some areas of undergraduate preparation may be assigned certain undergraduate prerequisite courses.
- 2. A recommended GRE combined verbal and quantitative score of 295.
- 3. Three letters of reference.
- 4. A statement of educational objectives and career goals.

Applicants not meeting all of the above departmental criteria may be admitted on a conditional basis if they meet Graduate Admissions admission requirements. A candidate for the Master of Science degree in Biology must fulfill a research tool requirement in addition to completing the 30 hours required for the degree.

## **UNIVERSITY REQUIREMENTS:**

See Graduate Degree Policies for additional information

## **PROGRAM REQUIREMENTS:**

- BIO 6003 Scientific Methods and Research Design Sem. Hrs: 3
- BIO 638V Thesis Sem. Hrs: Variable
- 6000-level Biological Sciences electives (at least two courses)
- Procedures, Tool and Statistics courses, as approved by graduate committee. Sem. Hrs: 3-4

#### **ELECTIVES:**

Elective courses in biology or graduate elective courses as approved by graduate committee, as needed to complete 33-34 hours.

### **TOTAL REQUIRED HOURS: 33-34**

AFTER:

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