THE STATE EDUCATION DEPARTMENT /
THE UNIVERSITY OF THE STATE OF NEW YORK / ALBANY, NY 12234

Change or Adapt a Registered Program[1]

Use this form to request program changes that require approval by the State Education Department (see chart on the following page). For **programs that are registered jointly** with another institution, all participating institutions must confirm support for the changes.

This application should **NOT** be used for the following types of requests:

- Proposals for new programs
- Requests for changes to registered programs preparing Teachers, Educational Leaders, and Other School Personnel
- Requests for changes to programs preparing Licensed Professionals; or
- Requests to add the Distance Education Format to a Registered Program

(**Note:** If the only requested change is to add the distance education format to an existing registered program, institutions need only complete and submit the Application to Add the Distance Education Format to a New or Registered Program.)

The application materials for requests for changes to registered programs preparing Teachers, Educational Leaders, and Other School Personnel or Licensed Professionals can be found at:

http://www.highered.nysed.gov/ocue/aipr/register.html

For requests to changes to Doctoral programs: please contact the Office of College and University Evaluation (OCUE).

Directions for submission of request:

1. Create a ***single*** PDF document that includes the following completed forms:

- Request to Change or Adapt a Registered Program
- Master Plan Amendment Supplement and Abstract (if applicable)
- External Review of Certain Degree Programs and Response (if applicable)
- Application to Add the Distance Education Format to a New or Registered Program, (if applicable).

2. Create a separate PDF document for any required syllabi (see p. 2 of form, Changes in Program Content)

3. Attach the PDF documents to an e-mail.

4. Send e-mail to **OCUERevAdmin@nysed.gov**

When submitting to the mailbox, include the following elements in the subject line of the e-mail:

[1] **CUNY and SUNY** institutions: contact System Administration for Request for Change submission process.

Changes and Adaptations Requiring State Education Department Approval
Changes in Program Content (all programs) 1. *Any* of the following substantive changes: ▪ Cumulative change from the Department's last approval of the registered program of one-third or more of the minimum credits required for the award (e.g., 20 credits in an associate degree program) ▪ Changes in the program's focus or design (e.g., eliminating management courses in a business administration program), including a change in the program's major disciplinary area ▪ Adding or eliminating an option or concentration ▪ Eliminating a requirement for completion, including an internship, clinical, cooperative education, or other work-based experience ▪ Altering the liberal arts and science content in a way that changes the degree classification, as defined in Section 3.47(c)(1-4) of Regents Rules
Other Changes (all programs) 2. Program title 3. Program award (e.g., change in degree) 4. Mode of delivery (**Note**: if the change involves adding a **distance education format** to a registered program, please complete the Application to Add the Distance Education Format to a New or Registered Program.) 5. Discontinuing a program 6. A format change that alters the program's financial aid eligibility (e.g., from full-time to part-time, or to an abbreviated or accelerated semester) 7. A change in the total number of credits of any certificate or advanced certificate program
Establishing New Programs Based on Existing Registered Programs 8. Creating a dual-degree program from existing registered programs 9. Creating a new program from a concentration/track in an existing registered program

PLEASE NOTE:

Establishing an existing program at a new location requires new registration of the program. If the requested action changes the program's major disciplinary area, master plan amendment may be needed if the revised program represents the institution's first program in that major subject area, at that degree level. If a requested **degree title** is not authorized for an institution chartered by the Board of Regents, charter amendment will be needed.

NEW YORK STATE EDUCATION DEPARTMENT
Office of Higher Education—Office of College and University Evaluation
89 Washington Avenue, Albany, NY 12234
(518) 474-1551 Fax: (518) 486-2779
http://www.highered.nysed.gov/ocue/
OCUERevAdmin@nysed.gov

Item	Response *(type in the requested information)*
Institution name and address	*Additional information*: ▪ Specify campus where program is offered, if other than the main campus: Lehman College
Identify the program you wish to change	Program title: Biology Award (e.g., B.A., M.S.): M.A. Credits: 34 HEGIS code: 0401.00 Program code: 02563
Contact person for this proposal	Name and title: Maryam Bamshad Telephone: 718-960-8646 Fax: 718-960-8236 E-mail:maryam.bamshad-alavi@lehman.cuny.edu
CEO (or designee) **approval** *Signature affirms the institution's commitment to support the program as revised.*	Name and title: Signature and date:
	Partner institution's name: Name and title of partner institution's CEO: Signature of partner institution's CEO:

[2] If the partner institution is non-degree-granting, see CEO Memo 94-04 at http://www.highered.nysed.gov/ocue/documents/ceo94-04.pdf

- For **programs that are registered jointly** with another institution, all participating institutions must confirm their support of the changes.

Check all changes that apply and provide the requested information.

Changes in Program Content *(Describe and explain all proposed changes; provide a side-by-side comparison of the existing and newly modified programs.)*

[ ] Cumulative change from the Department's last approval of the registered program that impacts one-third or more of the minimum credits required for the award (e.g., 20 credits in an associate degree program)

[ ] Changes in a program's focus or design

[ ] Adding or eliminating an option or concentration

[ ] Eliminating a requirement for program completion

[ ] Altering the liberal arts and science content in a way that changes the degree classification, as defined in Section 3.47(c)(1-4) of Regents Rules

If new courses are being added as part of the noted change(s), provide a syllabus for each new course and list the name, qualifications, and relevant experience of faculty teaching the course(s). Syllabi should include a course description and identify course credit, objectives, topics, student outcomes, texts/resources, and the basis for determining grades.

Other Changes *(describe and explain all proposed changes)*

[ ] **Program title**

[ ] **Program award**

[ ] **Mode of Delivery** (**Note**: if the change includes adding a **distance education format** to a registered program, please complete the Application to Add the Distance Education Format To a New or Registered Program.)

[ ] **Discontinuing a program**: indicate the date by which the program will be discontinued.[3]

[ ] **Format change** (e.g., from full-time to part-time, or to an abbreviated or accelerated semester)

a) Indicate proposed format:
b) Describe availability of courses and any change in faculty, resources, or support services:
c) Use the Sample Program Schedule in the Application for Registration of a New Program to show

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[3] If any students do not complete the program by the proposed termination date, the institution must request an extension of the registration period for the program or make other arrangements for those students.

the sequencing and scheduling of courses in the program.

d) If the revised program will be offered through a nontraditional schedule, provide a brief explanation of the schedule, including its impact on financial aid eligibility.
e) Confirm that for each (one) credit there is at least 15 hours (of 50 minutes each) of instruction and at least 30 hours of supplementary assignments.

Establishing New Programs Based on Existing Registered Programs

[ ] **Creating a dual-degree program** from existing registered programs

a) Complete the following table to identify the existing programs:

	Program Title	**Degree Award**	**Program Code**
Program 1			
Program 2			

b) Proposed dual-degree program (title and award):[4]
c) Courses that will be counted toward both awards:
d) Length of time for candidates to complete the proposed program:
e) Use Task 3: Sample Program Schedule from Application for Registration of a New Program to show the sequencing and scheduling of courses in the dual-degree program.

[X] **Creating a new program from a concentration/track in an existing program**.

If the new program is based ***entirely*** on existing courses in a registered program, provide the current program name, program code, and the following information:

Current program name: Biology, M.A.
Program code: 02563

Note: this abbreviated option applies only if a master plan amendment is NOT required ***and*** there are no new courses or changes to program admissions and evaluation elements. If these conditions are not met, submit a new registration application for the proposed program.

a) Information from the Application for Registration of a New Program:
   - Task 1 and Task 2a
   - Task 3 - Sample Program Schedule
   - Task 4 - Faculty information charts (full-time faculty, part-time faculty, and faculty to be hired)
b) Brief description of the proposed program and rationale for converting the existing coursework to a separately registered program: We are proposing to create a new MS degree in addition to the MA degree that we currently offer to provide an option for students that seek a more rigorous program in biological sciences and would like their degree to reflect their effort. Also, we currently have a BA to MS track in our department, which is an anomaly since we currently do not have an MS degree. The creation of an MS degree will resolve the inconsistencies in our program. The MS is a research-based degree and requires 30 credits of graduate work, of which up to six credits could be earned for thesis research (Three sequential thesis courses, a one- credit, a two-credit and a three-credit course for which the student receives only an SP grade until the student's thesis is written and defended

[4] Only candidates with the capacity to complete the requirements of both degrees shall be admitted to a dual-degree program.

before a research thesis committee consisting of at least three line-faculty of the department). To earn the MS degree, the student must select a thesis mentor and, with the help of our graduate advisor, construct a three-member thesis committee. The student then presents to the committee a formal thesis proposal which must be approved by the thesis committee. When the research is completed, the student writes a thesis, with the guidance of the mentor, and this thesis is presented to the thesis committee and formally defended before this committee. It is only on successful completion of the thesis defense, that the thesis is signed off by the mentor and the committee, and the SP grades for any thesis research courses taken are converted to a letter grade of B or better. The student would then be awarded an MS degree from the College.

c) Expected impact on existing program: None
d) Adjustments the institution will make to its current resource allocations to support the program: No adjustments are required.
e) Statement confirming that the admission standards and process and evaluation methods are the same as those in the existing registered program. We made no changes to the admission standards and process and evaluation methods. The specified requirements for the MS degree are the same as those in the existing registered MA degree program.

Note: if the change involves **establishing an existing registered program at a new location**, complete a new registration application for the proposed program.

Table B: Graduate Program Schedule MA Program

- *Indicate academic calendar type: ☒Semester ☐Quarter ☐Trimester ☐Other (describe):*
- *Label each term in sequence, consistent with the institution's academic calendar (e.g., Fall 1, Spring 1, Fall 2)*
- *Use the table to show how a typical student may progress through the program; copy/expand the table as needed.*

Term: Spring				Term:			
Course Number & Title	Credits	New	Prerequisite(s)	Course Number & Title	Credits		
BIO 501 Genetics	4		One year of College Biology				
BIO 502 Economic Botany	4		One Year of College Biology				
BIO 503 Topics in Urban Ecology	3		Graduate Adviser's Permission				
Term credit total:	11			Term credit total:			
Term: Fall				Term:			
Course Number & Title	Credits	New	Prerequisite(s)	Course Number & Title	Credits		
BIO 635 Neurophysiology	3		One undergraduate course in Animal Physiology, one year of Organic Chemistry				
BIO 644 Biological Chemistry	4		CHE 234 & CHE 235				
BIO 710 Microbial Physiology	4		Graduate Adviser's Permission				
Term credit total:	11			Term credit total:			
Term: Spring				Term:			
Course Number & Title	Credits	New	Prerequisite(s)	Course Number & Title	Credits		
BIO 610 Mammalian Physiology	4		Graduate Adviser's Permission				
BIO 642 Molecular Biology	4		BIO 644				
BIO 792.2 Tutorial	4		Graduate Adviser's Permission				
Term credit total:	12			Term credit total:			
Term:				Term:			
Course Number & Title	Credits	New	Prerequisite(s)	Course Number & Title	Credits		
Term credit total:				Term credit total:			

Program Totals:	**Credits: 34**	Identify any comprehensive, culminating element(s) (e.g., thesis or examination), including course number if applicable: 4-credit Tutorial (BIO 792.2)

New = indicate if new course **Prerequisite(s)** = list prerequisite(s) for the noted course

Table B: Graduate Program Schedule MS Program

- *Indicate academic calendar type: ☒Semester ☐Quarter ☐Trimester ☐Other (describe):*
- *Label each term in sequence, consistent with the institution's academic calendar (e.g., Fall 1, Spring 1, Fall 2)*
- *Use the table to show how a typical student may progress through the program; copy/expand the table as needed.*

Term: Spring					Term:		
Course Number & Title	Credits	New	Prerequisite(s)		Course Number & Title	Credits	
BIO 501 Genetics	4		One year of College Biology				
BIO 502 Economic Botany	4		One Year of College Biology				
BIO 630 Seminar	1		Graduate Adviser's Permission				
Term credit total:	9				Term credit total:		
Term: Fall					Term:		
Course Number & Title	Credits	New	Prerequisite(s)		Course Number & Title	Credits	
BIO 635 Neurophysiology	3		One undergraduate course in Animal Physiology, one year of Organic Chemistry				
BIO 644 Biological Chemistry	4		CHE 234 & CHE 235				
BIO 799.1 Thesis Research	1		Graduate Adviser's Permission				
BIO 630 Seminar	1		Graduate Adviser's Permission				
Term credit total:	9				Term credit total:		
Term: Spring					Term:		
Course Number & Title	Credits	New	Prerequisite(s)		Course Number & Title	Credits	
BIO 610 Mammalian Physiology	4		Graduate Adviser's Permission				
BIO 642 Molecular Biology	4		BIO 644				
BIO 799.2 Thesis Research	2		Graduate Adviser's Permission				
BIO 799.3 Thesis Research	2		Graduate Adviser's Permission				
Term credit total:	12				Term credit total:		
Term:					Term:		
Course Number & Title	Credits	New	Prerequisite(s)		Course Number & Title	Credits	
Term credit total:					Term credit total:		

Program Totals:	**Credits: 30**	Identify any comprehensive, culminating element(s) (e.g., thesis or examination), including course number if applicable: 5-credit thesis Bio 799.1, 799.2 and 799.3
New = indicate if new course	**Prerequisite(s)** = list prerequisite(s) for the noted course	

LEHMAN COLLEGE
OF THE
CITY UNIVERSITY OF NEW YORK

DEPARTMENT OF BIOLOGICAL SCIENCES

CURRICULUM CHANGE

Name of Program and Degree Award: Biology, MS
Hegis Number: 0401.00
Effective Term: Fall 2018

1. **Type of Change:** Creating MS degree from existing track within MA degree

2. **Description:**

Admission Requirements

- A bachelor's degree (or its equivalent) from an accredited college or university.
- Demonstrate the potential to pursue graduate study successfully - that is, have attained a minimum undergraduate grade average of B in the field selected for the graduate major and a minimum grade average of B- in the undergraduate record as a whole.
- Have completed a major in biology, chemistry, physics, or an allied field.
- With Undergraduate Specialization in Biology:
  Candidates whose undergraduate major was in biology must have completed: (1) one year of organic chemistry, with laboratory; (2) one year of college physics; and (3) either one year of calculus or one semester of calculus and a semester of statistics.
- With Undergraduate Specialization in Chemistry, Physics, or Allied Field:
  Candidates whose undergraduate major was in either chemistry, physics, or an allied field must have completed: (1) the equivalent of an undergraduate minor in biology; (2) one year of organic chemistry, with laboratory; (3) one year of college physics; and (4) either one year of calculus or one semester of calculus and a semester of statistics.
- In addition, students must submit up to three letters of recommendation and, if conditionally admitted, satisfy the conditions within one year.

Degree Requirements

- All students (matriculated or nonmatriculated) should consult with the Departmental Graduate Adviser regarding their programs.
- A student must complete 30 credits of coursework and complete an independent laboratory research project. A student may elect to substitute 1 to 6 credits in original laboratory research (BIO 799.1, 799.2, and 799.3) for 1 to 6 credits of coursework. When a student is ready to select a research problem, a research advisory committee of faculty members will be

established in consultation with his or her thesis adviser* to guide the investigation. A thesis based on this research must be defended satisfactorily in an oral presentation prior to its submission in partial fulfillment of the requirements for the degree of Master of Science. Approved copies of the thesis must be deposited in the Lehman College Library and the Department of Biology.

- *Students who choose a thesis adviser at the New York Botanical Garden or at another institution must have an "in-house" adviser. This individual must be a full-time faculty member of the Department of Biological Sciences at Lehman College and a member of the graduate faculty in biological sciences.

Academic Probation and Continuation

- All graduate students whose GPA falls between 2.7 and 3.0 will be placed on academic probation. See the College's graduate policies and procedures regarding probation and continuation.
- Graduate students in Biological Sciences degree programs whose GPA falls below 2.7 will not be eligible for probation and may only continue in their program upon successful appeal to the Graduate Studies Committee.
- Students who received a failing grade in a course and have a cumulative GPA between 2.7 and 3.0 will only be granted one semester to make sufficient progress towards degree completion and bring the GPA back up to 3.0 or above. Students may not continue in any course for which the failed course is a prerequisite. If the GPA is not raised to a 3.0 or above by the end of the next registered semester the student will be asked to discontinue their program of study.
- Students, who receive two failing grades in any of the courses satisfying the degree curriculum, will not be eligible for probation and will be asked to discontinue their program of study.

3. **Rationale:**

We are proposing to create a new MS in biology degree, in addition to the current MA in biology degree, to provide an option for students who seek a more rigorous program in biological sciences and would like their degree to reflect their effort. The proposed MS in biology is created from one of the tracks within the existing MA in biology, is comprised of the exact courses and requirements from this track and is a research-based degree.

The MS has the same requirements (e.g., admission, continuation) as the existing MA degree. Further, no new curriculum is being proposed for the MS degree. The MS will be comprised of existing courses.

It also should be noted that under the above-listed “degree requirements,” it states, “a student may elect to substitute 1-6 credits.” In the MA degree, where this track first existed, the original text stated

“3-6 credits.” A change has not been made to this requirement; rather the prior text printed in the catalogue was incorrect, and the requirement listed above is the correct number of credits. Therefore, again, no change in requirements has been made. The proposed MS in biology has the same admission and continuation requirements as the existing MA in biology.

4. **Date of departmental approval:** October 18, 2017

LEHMAN COLLEGE
OF THE
CITY UNIVERSITY OF NEW YORK

DEPARTMENT OF BIOLOGICAL SCIENCES

CURRICULUM CHANGE

Name of Program and Degree Award: Biology, MA
Hegis Number: 0401.00
Program Code: 02563
Effective Term: Fall 2018

1. **Type of Change**: Change in Degree Requirements

2. **From:**
Master of Arts in Biology

Admission Requirements

- A bachelor's degree (or its equivalent) from an accredited college or university.
- Demonstrate the potential to pursue graduate study successfully - that is, have attained a minimum undergraduate grade average of B in the field selected for the graduate major and a minimum grade average of B- in the undergraduate record as a whole.
- Have completed a major in biology, chemistry, physics, or an allied field.
- With Undergraduate Specialization in Biology:
  Candidates whose undergraduate major was in biology must have completed: (1) one year of organic chemistry, with laboratory; (2) one year of college physics; and (3) either one year of calculus or one semester of calculus and a semester of statistics.
- With Undergraduate Specialization in Chemistry, Physics, or Allied Field:
  Candidates whose undergraduate major was in either chemistry, physics, or an allied field must have completed: (1) the equivalent of an undergraduate minor in biology; (2) one year of organic chemistry, with laboratory; (3) one year of college physics; and (4) either one year of calculus or one semester of calculus and a semester of statistics.
- In addition, students must submit up to three letters of recommendation and, if conditionally admitted, satisfy the conditions within one year.

Degree Requirements

All students (matriculated or nonmatriculated) should consult with the Departmental Graduate Adviser regarding their program~~s~~. ~~The following three tracks toward the Master of Arts degree are available:~~

~~Independent Laboratory Research (Track A). (30 credits)~~

~~A student may elect to substitute 3 to 6 credits in original laboratory research (BIO 799.1, 799.2, and 799.3) for 3 to 6 credits of coursework. When a student is ready to select a research problem, a research advisory committee of faculty members will be established in consultation with his or her thesis adviser,* to guide the investigation. A thesis based on this research must be defended satisfactorily in an oral presentation prior to its submission in partial fulfillment of the requirements for the degree of Master of Arts. Approved copies of the thesis must be deposited in the Lehman College Library and the Department of Biology.~~

~~*Students who choose a thesis adviser at the New York Botanical Garden or at another institution must have an "in-house" adviser. This individual must be a full-time faculty member of the Department of Biological Sciences at Lehman College and a member of the graduate faculty in biological sciences.~~

~~Comprehensive Examination (Track B). (30 credits)~~

~~Students who select this track must complete 30 credits and then must pass a comprehensive examination (which is the CUNY Doctoral Program in Biology's First Examination). Passing this examination will not only meet the requirements for the Master of Arts degree but also qualify the student to proceed into the CUNY Doctoral Program in Biology. A grade of 65 is deemed a passing grade to meet the requirements for the Master of Arts degree, while a grade of 70 is the minimal passing grade that will allow the student to proceed into the CUNY Doctoral Program in Biology (subject to satisfactory meeting of other admission requirements).~~

~~Tutorial (Track C). 34 credits.~~

A student must ~~include~~ 4 credits of tutorial (BIO 792.2) ~~as part of 34 credits~~ ~~required~~ ~~in this track~~. This tutorial is performed under the supervision of a member of the graduate faculty in Biological Sciences. It is intended to involve the student in the performance of a carefully supervised project. The project may involve research in the laboratory, a library review of relevant topics, or a combination of the two. The results of this project will be written and submitted to the Department of Biological Sciences in partial fulfillment of the requirements of the master's degree. This document will become part of the departmental library.

Academic Probation and Continuation

- All graduate students whose GPA falls between 2.7 and 3.0 will be placed on academic probation. See the College's graduate policies and procedures regarding probation and continuation.
- Graduate students in Biological Sciences degree programs whose GPA falls below 2.7 will not be eligible for probation and may only continue in their program upon successful appeal to the Graduate Studies Committee.

- Students who received a failing grade in a course and have a cumulative GPA between 2.7 and 3.0 will only be granted one semester to make sufficient progress towards degree completion and bring the GPA back up to 3.0 or above. Students may not continue in any course for which the failed course is a prerequisite. If the GPA is not raised to a 3.0 or above by the end of the next registered semester the student will be asked to discontinue their program of study.
- Students, who receive two failing grades in any of the courses satisfying the degree curriculum, will not be eligible for probation and will be asked to discontinue their program of study.

3. **To:**

Master of Arts in Biology

Admission Requirements

- A bachelor's degree (or its equivalent) from an accredited college or university.
- Demonstrate the potential to pursue graduate study successfully - that is, have attained a minimum undergraduate grade average of B in the field selected for the graduate major and a minimum grade average of B- in the undergraduate record as a whole.
- Have completed a major in biology, chemistry, physics, or an allied field.
- With Undergraduate Specialization in Biology:
  Candidates whose undergraduate major was in biology must have completed: (1) one year of organic chemistry, with laboratory; (2) one year of college physics; and (3) either one year of calculus or one semester of calculus and a semester of statistics.
- With Undergraduate Specialization in Chemistry, Physics, or Allied Field:
  Candidates whose undergraduate major was in either chemistry, physics, or an allied field must have completed: (1) the equivalent of an undergraduate minor in biology; (2) one year of organic chemistry, with laboratory; (3) one year of college physics; and (4) either one year of calculus or one semester of calculus and a semester of statistics.
- In addition, students must submit up to three letters of recommendation and, if conditionally admitted, satisfy the conditions within one year.

Degree Requirements

All students (matriculated or nonmatriculated) should consult with the Departmental Graduate Adviser regarding their program.

A student must complete 34 credits of coursework including 4 credits of tutorial (BIO 792.2). This tutorial is performed under the supervision of a member of the graduate faculty in Biological Sciences. It is intended to involve the student in the performance of a carefully supervised project. The project may involve research in the laboratory, a library review of relevant topics, or a combination of the two.

The results of this project will be written and submitted to the Department of Biological Sciences in partial fulfillment of the requirements of the master's degree. This document will become part of the departmental library.

Academic Probation and Continuation

- All graduate students whose GPA falls between 2.7 and 3.0 will be placed on academic probation. See the College's graduate policies and procedures regarding probation and continuation.
- Graduate students in Biological Sciences degree programs whose GPA falls below 2.7 will not be eligible for probation and may only continue in their program upon successful appeal to the Graduate Studies Committee.
- Students who received a failing grade in a course and have a cumulative GPA between 2.7 and 3.0 will only be granted one semester to make sufficient progress towards degree completion and bring the GPA back up to 3.0 or above. Students may not continue in any course for which the failed course is a prerequisite. If the GPA is not raised to a 3.0 or above by the end of the next registered semester the student will be asked to discontinue their program of study.
- Students, who receive two failing grades in any of the courses satisfying the degree curriculum, will not be eligible for probation and will be asked to discontinue their program of study.

4. **Rationale:**

We are removing the comprehensive examination track from the MA degree as this is no longer viable. This option was created when it was possible for students to be invited to take the Ph.D. First examination. With the change in the Ph.D. Program, the option for entering the Ph.D. program was eliminated. Therefore, MA students were no longer invited to take the discipline-based Ph.D. First Examination. Since that time we have stopped offering the comprehensive examination, and the option is no longer part of our Lehman Biology Master's Program. Therefore, it should be removed from our catalogue.

We are also removing the thesis track from the MA degree and using it to create a new MS degree. The change will give students the option to complete a tutorial and graduate with an MA degree or complete a research thesis and graduate with an MS degree. We think that the change in degree requirements and degree names would better represent the type of studies students complete to earn those degrees. The proposed changes would enable students to earn an MA by completing 30 credits of formal course work plus a single one semester 4-credit tutorial with a faculty member of the Department of Biological Sciences.

5. **Date of departmental approval**: October 18, 2017