



Program Approval Form

For approval of new programs and deletions or modifications to an existing program.

Registrar.

Action Requested:

Create New (SCHEV approval required except for concentration, minors, and certificates)
 Delete Existing
 Modify Existing (check all that apply)
 Title (SCHEV approval required except for concentration, minors, certificates)
 Degree Requirements Admission Standards
 Application Requirements
 Other Changes: _____

Type (Check one):

B.A. B.S. Minor
 Undergraduate Certificate
 M.A. M.S. M.Ed.
 Ph.D. Graduate Certificate
 Concentration
 Other: _____

College/School: **Department:**
Submitted by: **Ext:** **Email:**

Effective Term: Fall **Please note:** For students to start a new degree, minor, certificate or concentration, the program must be fully approved, entered into Banner, and published in the University Catalog.

Justification: (attach separate document if necessary)

Program Title: (Required)
Use title to identify subject matter. Do not include name of college/school or department.

Concentration Title(s):

Admissions Standards / Application Requirements:
(Required only if different from those listed in the University Catalog)

Degree Requirements:
Consult University Catalog for models, attach separate document if necessary using track changes for modifications

Courses offered via Distance:
(if applicable)

TOTAL CREDITS REQUIRED:

Existing	New/Modified
BA Biology	BA Biology
See attached	See attached

Approval Signatures

Department _____ Date _____ College/School _____ Date _____ Provost's Office _____ Date _____
Required for Undergraduate Programs Only

If this program may impact another unit or is in collaboration with another unit at Mason, the originating department must circulate this proposal for review by those units and obtain the necessary signatures prior to submission. Failure to do so will delay action on this proposal.

Unit Name	Unit Approval Name	Unit Approver's Signature	Date

For Graduate Programs Only

Graduate Council Member _____ Provost Office _____ Graduate Council Approval Date _____

Justification

The core biology curriculum has not been thoroughly revised since 1989. The intent of the new curriculum is to achieve the following goals: 1) Dispense with old fashioned organismal approaches in favor of an integrated approach to biology reflecting recent advances in our understanding of the evolution of life, the molecular basis of evolution, and advances in our understanding of genetics and cell biology; 2) Provide a core course that better integrates evolutionary biology with the ecological sciences; 3) Equip students with statistical tools early in their course work and apply these tools in subsequent core courses; 4) Provide small group work through recitation sections that will allow more writing and encourage more quantitative approaches in the core courses; 5) Provide a set of core courses that can be completed in four semester, thereby encouraging more upper division course opportunities; 6) Ensure adequate laboratory training by requiring one laboratory based course beyond the core; 7) Develop a new two semester laboratory based Anatomy and Physiology sequence for Biology and Medical Technology majors to meet the requirements of professional schools; and 8) Simplify the graduation requirements.

Biology, BA

Banner Code: SC-BA-BIOL

Students must fulfill all [requirements for bachelor's degrees](#) , including [university general education requirements](#) . Students majoring in biology must complete additional [college requirements for the BA degree](#) in COS. Students must also complete the following credits with a minimum GPA of 2.00 in the 32 credits of BIOL courses and a minimum GPA of 2.00 in the supporting courses listed below. No more than 4 credits of 100- or 200-level BIOL courses (103, 104 or 246) may be applied toward the 32 credits of required BIOL courses. Credit for BIOL 246 is limited to transfer students and only with permission of the Undergraduate Coordinator. Biology majors must earn a minimum grade of C in all biology core courses listed below. A grade of C or better must be earned in BIOL 213 in order to advance to other major requirements. Students may repeat BIOL 213 once and a second time only with permission of the Director of the Biology Program. Once a student has taken BIOL 213 he/she is no longer eligible to receive biology elective credit for 100 level biology courses. Through the course work below, biology majors satisfy the university-wide requirements in natural science, quantitative reasoning, and information technology proficiency.

Degree Requirements

22 credits of biology core courses:

- BIOL 213 - Cell Structure and Function Credits: 4
- BIOL 214 - Introduction to Biostatistics Credits: 4
- BIOL 311 - General Genetics Credits: 4
- BIOL 308 - Foundations of Ecology and Evolution Credits: 5
- BIOL 310 - Biodiversity Credits: 5

10 credits of biology electives:

- 10 credits of biology electives; 6 of these credits must be upper division and one of these upper division courses must include a laboratory

8 credits of chemistry:

- [CHEM 211 - General Chemistry](#) Credits: 4
- [CHEM 212 - General Chemistry](#) Credits: 4

3-4 credits of Mathematics chosen from:

- [MATH 111 - Linear Mathematical Modeling](#) Credits: 3
- [MATH 113 - Analytic Geometry and Calculus I](#) Credits: 4
- [MATH 114 - Analytic Geometry and Calculus II](#) Credits: 4
- Equivalent of MATH 108 - Introductory Calculus with Business Applications Credits: 3, accepted for transfer students only

3 credits of computer science chosen from one of the following:

- CDS 130 – Computing for Scientists Credits: 3
- [IT 103 - Introduction to Computing](#) Credits: 3

6 credits chosen from:

- [ASTR 103 - Astronomy](#) Credits: 3
- [ASTR 111 - Introductory Astronomy: The Solar System](#) Credits: 3
- [ASTR 113 - Introductory Astronomy: Stars, Galaxies, and the Universe](#) Credits: 3
- [GEOL 101 - Introductory Geology I](#) Credits: 4
- [GEOL 102 - Introductory Geology II](#) Credits: 4
- [PHYS 243 - College Physics](#) Credits: 3
- [PHYS 245 - College Physics](#) Credits: 3

Note:

Students expecting to enter graduate or professional school are strongly urged to complete MATH 113 and 114. Organic chemistry and PHYS 243, 244, 245, and 246 are also recommended.