

Course Change Request

Date Submitted: 11/17/20 7:51 am

Viewing: **BIOL 103 : Introductory Biology II-Survey
of Cell and Molecular Biology †**

Last approved: 09/01/20 4:53 am

Last edit: 11/17/20 7:51 am

Changes proposed by: dpolayes

Programs referencing this course

[SC-BA-BIOL: Biology, BA](#)

[SC-BS-BIOL: Biology, BS](#)

[EVSC: Environmental Science Minor](#)

[UH BS COMH: Community Health, BS](#)

Select modification type:

In Workflow

1. Registrar-
Courses:Title
Change
2. BIOL
Undergraduate
Representative
3. SC Curriculum
Committee
4. SC Associate Dean
5. Assoc Provost-
Undergraduate
6. Registrar-Courses
7. Banner

Approval Path

1. 10/19/20 10:25 am
Geraldine Grant
(ggrant1): Approved
for BIOL
Undergraduate
Representative
2. 10/26/20 4:37 pm
Gregory Craft
(gcraft): Rollback to
Initiator
3. 11/17/20 9:28 am
Tory Sarro (vsarro):
Approved for
Registrar-
Courses:Title
Change
4. 11/17/20 10:54 am
Geraldine Grant
(ggrant1): Approved
for BIOL

Undergraduate
Representative

History

1. Aug 29, 2017 by pchampan
2. Oct 31, 2018 by pxiong
3. Sep 1, 2020 by Tory Sarro (vsarro)

Substantial

Are you completing this form on someone else's behalf?

No

Effective Term: Fall 2021

Subject Code: BIOL - Biology

Course Number: 103

Bundled Courses:

Is this course replacing another course? No

Equivalent Courses: ~~BIOL 103F - Intr Biol I - Non lab Transfer~~

Catalog Title: Introductory Biology **II-Survey of Cell and Molecular Biology †**

Banner Title: Introductory Biology **II †**

Will section titles vary by semester? No

Credits: **3 †**

Schedule Type: Lecture ~~w/Lab~~

Hours of Lecture or Seminar per week: 3

Repeatable: May be only taken once for credit, limited to 3 attempts (N3)

Max Allowable Credits:
9 †

Default Grade Mode: Undergraduate Regular

Recommended Prerequisite(s):

**Recommended
Corequisite(s):**

**Required
Prerequisite(s) /
Corequisite(s)
(Updates only):**

Registrar's Office Use Only - Required Prerequisite(s)/Corequisite(s):

And/Or	(Course/Test Code	Min Grade/Score	Academic Level)	Concurrency?

**Registration
Restrictions
(Updates only):**

Registrar's Office Use Only - Registration Restrictions:

Field(s) of Study:

Class(es):

Level(s):

Degree(s):

School(s):

**Catalog
Description:**

This survey of Cell and Molecular biology provides students with an understanding of basic cellular biology and an appreciation of the impact of molecular biology research on current societal challenges.

Topics include **how life emerged on early earth, chemistry of life,** cell structure and function, **genes Mendelian genetics, evolution,** and **heredity, plus viruses and genetic engineering. diversity of life.** Notes:

Students are encouraged to take BIOL102 or equivalent prior to BIOL103. Survey course suitable for any major. **Biology Majors may May not take be taken** after **BIOL200-level BIOL-200-level** or above courses have been taken. **Offered by Biology. Limited to three attempts**

Justification:

The revised BIOL103 groups together key topics on cell and molecular biology that were previously presented in both the semesters of introductory biology.

The name change reflects this organization and so will facilitate all programs directing their students to the correct introductory biology course.

The revised course also contains additional case-studies which expand on these “traditional” cell biology

topics and highlight the relevance of the subject to current societal challenges, as well as providing an opportunity for students to gain skill in evaluating scientific information.

This change brings the revised course to even better alignment with the goals of the Mason Core Natural Science program.

The course revision also removes the lab from the class. The lab material is now available as the stand-alone BIOL105 and is not required for BIOL103. This will better serve the biology majors who need the lecture material in order to succeed in BIOL213, but would not benefit from the lab course. Other majors may continue to earn their complete Mason Core Natural Science with Lab credits in this class by enrolling in both BIOL103 and BIOL105.

Does this course cover material which crosses into another department? No

Learning Outcomes:

1. Understand how scientific inquiry is based on investigation of evidence from the natural world, and that scientific knowledge and understanding: a) evolves based on new evidence, and b) differs from personal and cultural beliefs.
2. Recognize the scope and limits of science.
3. Recognize and articulate the relationship between the natural sciences and society and the application of science to societal challenges (e.g., health, conservation, sustainability, energy, natural disasters, etc.).
4. Evaluate scientific information (e.g., distinguish primary and secondary sources, assess credibility and validity of information).

Attach Syllabus

[New-103-Syl-Fall-2021 \(1\).pdf](#)

Additional Attachments

[new-NSNLmap-BIOL103.pdf](#)

Specialized Course

Categories:

Mason Core

Select the Mason Core Requirement the course is proposing to fulfill:

Foundation

Courses:

Exploration

Courses:

Natural Sciences w/Lab

Integration

Courses:

Natural Sciences with Lab

Course must meet the following learning outcomes:

1. Understand how scientific inquiry is based on investigation of evidence from the natural world, and that scientific knowledge and understanding: a) evolves based on new evidence, and b) differs from personal and cultural beliefs
2. Recognize the scope and limits of science.
3. Recognize and articulate the relationship between the natural sciences and society and the application of science to societal challenges (e.g., health, conservation, sustainability, energy, natural disasters, etc.).
4. Evaluate scientific information (e.g., distinguish primary and secondary sources, assess credibility and validity of information).
5. Participate in scientific inquiry and communicate the elements of the process, including: a) making careful and systematic observations, b) developing and testing a hypothesis, c) analyzing evidence, and d) Interpreting results.

I affirm that I have attached the following using the syllabus and attachment buttons provided above: (see “?” for help with submission)

Additional Comments:

From the Mason Core we need to eliminate the 5th requirement since the lab is no longer a component of this course

Enrollment in both BIOL103 and BIOL105 fulfills the Mason Core Natural Science with Lab requirement. Students must be enrolled in both a laboratory and lecture section to obtain that designation. Enrollment in BIOL103 alone fulfills the Mason Core Natural Science (without lab) requirement. No credit will be awarded to students who are not appropriately enrolled by the official deadlines.

Reviewer Comments

Gregory Craft (gcraft) (10/26/20 4:37 pm): Rollback: rollback per COSCC meeting

Key: 1403