

Course Change Request

New Course Proposal

Date Submitted: 11/15/19 11:08 am

Viewing: **BIOL 340 : Introductory Botany**

Last edit: 11/15/19 11:08 am

Changes proposed by: dpolayes

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

No

Effective Term: Fall 2020

Subject Code: BIOL - Biology

Course Number:
340

Bundled Courses:

Is this course replacing another course? No

Equivalent Courses:

Catalog Title: Introductory Botany

Banner Title: Introductory Botany

Will section titles vary by semester? No

Credits: 4

Schedule Type: Lecture w/Lab

Hours of Lecture or Seminar per week: 3

Hours of Lab or Studio per week: 3

Repeatable: May be only taken once for credit, limited to 3 attempts (N3) **Max Allowable Credits:** 12

Default Grade Mode: Undergraduate Regular

Recommended Prerequisite(s):
a 100-level introductory biology and/or BIOL213.

Recommended Corequisite(s):

In Workflow

1. **BIOL**
Undergraduate
Representative

2. **SC Curriculum**
Committee

3. SC Associate Dean

4. Assoc Provost-
Undergraduate

5. Registrar-Courses

6. Banner

Approval Path

1. 12/04/19 5:59 pm
Geraldine Grant
(ggrant1): Approved
for BIOL
Undergraduate
Representative

**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:**

Introduction to study of plants, their structure, development, nutrition, and ecology. Surveys of many groups of plants and their phylogenetic relationships will be studied.

Justification:

For entry level Federal field-tech jobs there is a requirement for a minimum of 9 credits of botany. We don't offer enough Botany classes to fulfill that requirement.

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

Learning Outcomes:

: Students will: 1) learn fundamental concepts in plant biology from cellular anatomy to ecosystem processes; 2) develop an understanding of plant structure and function, including perspectives from ecology and evolution; 3) uncover the role of plants in human affairs, including their application in forensic science investigations; 4) practice tools of plant science including field, greenhouse, and laboratory methods as well as data analysis techniques.

Attach Syllabus

[BIOL340-Syllabus.pdf](#)

**Additional
Attachments**

Staffing:

Faculty exist who can teach this class

Relationship to

Existing Programs:

Adds an additional Plant course for our students that both biology and EVPP students need

Relationship to

Existing Courses:

Our other Plant/Botany courses are much more specialized than this class.

Additional

Comments:

Reviewer

Comments

BIOL340 – General Botany (4 credits) – SPRING 2021

Time & Location: (Lecture) MWF 3:30-4:20 pm and (Lab) M 9-11:45 am

Instructor: Dr. Weeks Office hours and location: TBD, EXPL L109

Contact information & communications policy: aweeks3@gmu.edu. I respond to email inquiries within 24 hours of receiving them between regular working hours Monday-Friday.

Blackboard: Announcements, lecture presentations, practice exams and keys, grades, and all other documents are posted to the Blackboard. Students are responsible for checking this site if they are unable to attend class.

Prerequisites: a 100-level introductory biology and/or BIOL213.

Required items:

1. Biology of Plants 8th edition. Evert & Eichhorn. W. H. Freeman. ISBN-13: 978-1464117800
2. Laboratory Topics in Botany 8th edition Evert et al. W. H. Freeman. ISBN-13: 978-1464118104
3. Dissection Kit.

Course objectives:

Students will: 1) learn fundamental concepts in plant biology from cellular anatomy to ecosystem processes; 2) develop an understanding of plant structure and function, including perspectives from ecology and evolution; 3) uncover the role of plants in human affairs, including their application in forensic science investigations; 4) practice tools of plant science including field, greenhouse, and laboratory methods as well as data analysis techniques.

Course grading: Your grade is based on points earned. All significant digits are saved from individual scores. Final tallies of all scores are rounded to the nearest integer to determine letter grade based. Standard letter grades are applied: A+ = 97-100%, A = 94-96%, A- = 90-93%, B+ = 87-89%, B = 84-86%, B- = 80-83%, C+ = 77-79%, C = 70-76%, D = 60-69%, F = 0-59%.

Lecture Exam 1	15%
Lecture Exam 2	15%
Lecture Exam 3	15%
Lab Quizzes (best 9 of 10)	10%
Lab Reports (3)	10%
Lab Practical 1	5%
<u>Final Exam</u>	<u>10%</u>
Total	100%

Students want to know, “How can I get a good grade in this class?” Consistency of attendance and hand-written note taking in lecture are the strongest predictors of success in this course. There are only 25 data lectures this semester. Scientific experiments have shown that hand-writing notes results in better learning gains than keyboard typing (<http://www.scientificamerican.com/article/a-learning-secret-don-t-take-notes-with-a-laptop/>). I recommend the Cornell System for note taking (<http://www.wikihow.com/Take-Cornell-Notes>) as it makes for more effective studying. Mason recommends this video about note-taking: https://www.youtube.com/watch?time_continue=617&v=THT8u_awAil.

About grade curving: Lecture exam averages in my courses are generally lower than the typical 75% because my exams are challenging. Thus, lecture examination scores may be curved at the end of the semester. During the semester, each student should pay close attention to where his/her exam scores lie relative to the mean of the class as this is the best indicator of above- or below-average performance. Because of the GPA requirements of the Biology major, C- grades are not given in this class.

Extra credit: There is one 5 point opportunity during October 20-23, 2016 via participation in the www.wedigbio.org event. Participation can be virtual by logging-in remotely during October 20-23 or in-person (Friday October 21, 10:30 am-2 pm; Fenwick Library Room 2001 – bring your own internet device). Full details are provided on Blackboard.

Accommodations: If you have a documented learning disability or other condition that may affect academic performance you should: 1) make sure this documentation is on file with Office of Disability Services (SUB I, Rm. 2500; 993-2474; <http://ods.gmu.edu>) to determine the accommodations you need; and 2) talk with me to discuss your accommodation needs as soon as possible in the semester.

Academic integrity: Students are required to follow the University Honor Code. In the context of this course, this means one must not “cheat, plagiarize, steal, or lie in matters related to academic work” (see <http://oai.gmu.edu/the-masonhonor-code-2/>). Violations are reported to the Honor Committee for review.

Lecture & electronic device etiquette: Creating a supportive learning environment means respecting one another’s time and space, thus arriving late, surfing the web and holding off-topic conversations distracts everyone from the task of learning. If arriving late, please arrive as quietly as you can. Also, please turn off all phone audio signals before class.

Lecture exams:

a. **studying:** budget a full week of reviewing before an exam. Old exams will be posted for additional practice.

b. **the day of the exam:** Hats, coats, and bags should be deposited at the front of the lecture hall. Cell phones and other electronic devices may not be out or used during any exam. Assigned seating may be used.

c. **arriving late to an exam:** If you are late to an exam and one or more student(s) has finished the exam and left the room, you will not be allowed to take the exam – no excuses or exceptions.

d. **make-up exams:** Students who unavoidably miss an exam should notify Dr. Weeks directly by email as soon as possible. The make-up exam will be given at one time only directly before or after the final exam. The make-up exam covers material from exams 1, 2 and 3. Only one exam may be made up.

e. **exam dates and times:** Exam date and times during the semester will not be altered unless the university closes or by mutual agreement. The final exam will only be offered at the date and time given on the syllabus.

f. **return of grades and exams:** Examination keys and scores are posted to Blackboard typically within 3 days.

g. **corrections of grading errors:** If errors are made in scoring exams, notify the instructor within one week of the day the exam was returned. After one week, corrections will not be considered.

h. **exam logistics if university closes unexpectedly:** If a class is canceled for any reason in which an exam is scheduled, the exam will be given in the next regularly scheduled class. If the class meeting immediately prior to an exam date (e.g., a Monday when the exam is scheduled for Wednesday of the same week) is canceled so that material to be covered on the exam is not finished in lecture, then the exam will be delayed one class meeting.

i. **final exam:** The final exam is cumulative. The final exam will only be offered at the date and time given on the syllabus. Lab attendance: There are no make-up labs.

GENERAL INFORMATION

GMU Email Accounts

Students must use their Mason email accounts to receive important University information, including messages related to this class. See <http://masonlive.gmu.edu> for more information.

Other Useful Campus Resources:

Learning Services: SUB I, Room 3129; (703) 993-2999; <http://caps.gmu.edu/learning-services/> Excellent videos about study skills: <http://caps.gmu.edu/learning-services/academic-skills-videos/>
 Counseling and Psychological Services (CAPS): (703) 993-2380; <http://caps.gmu.edu>

CLASSMATE CONTACTS: _____ & _____

SPRING 2021 SCHEDULE – last modified: 10/31/2019

Week of:	Lecture	Laboratory
18-Jan	Plants in Human Affairs: Chapter 34	lab does not meet (MLK Day)
25-Jan	Early Development of the Plant Body	1:
1-Feb	Cells and Tissues of the Plant Body	2: Quiz
8-Feb	The Root	3: Quiz
15-Feb	The Shoot	4: Quiz
22-Feb	Secondary Growth, Exam 1	5: Quiz
1-Mar	Regulating Growth and Development: plant hormones	6: Quiz
Spring Recess		
15-Mar	External Factors to Plant Growth, including Mineral Nutrition	7: Lab Practical I (Labs 1-6)
22-Mar	Movement of Water and Solutes in Plants	8: Quiz
29-Mar	Seedless plants, Exam 2	9: Quiz
5-Apr	Gymnosperms	10: Quiz
12-Apr	Angiosperms, I	11: Quiz
19-Apr	Angiosperms, II	12: Quiz
26-Apr	Dynamics of Plants in Communities and Ecosystems	13: Field trip to Turkey Run
3-May	Exam 3; last day of classes 3-May	14: Lab Practical II (Labs 7-13)
TBD-May: Final Exam		