

General Biology: diversity; physiology; ecology
BIOL. 119 (02), CRN# 54962
MWF 12:30-1:20, Instructors: Drs. Feissner and McCartney
Course Syllabus: Spring, 2016

Course Description: An introductory course in the biological sciences covering animal diversity, animal biology, plant biology, and ecology. Biol 119 Counts for general education only when taken with BIOL 116. This course has a prerequisite of BIOL 117 and is intended for science majors and other well-prepared students.

Course Instructors:

Dr. Robert Feissner

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Office hours: Tuesday & Thursday
10:30-12:00, and by appointment.

Dr. Jacob McCartney

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Office hours: Tuesday 2:00-3:30,
Wednesday 10:30-12:00 and by
appointment

Textbook and Required Materials:

Textbook: Absolutely required for this course are the textbook (or eText) **Biological Science** by Freeman *et al.*, Pearson Cummings Publisher and the **MasteringBiology website access code**. Through the SUNY Geneseo bookstore you can buy a package that consists of the textbook with the MasteringBiology access code and several other texts that you will find helpful. These include: Get Ready for Biology, Practicing Biology: A student workbook for biological sciences, and the MasteringBiology + eText access codes. The bookstore also offers a package that does not include the hardcover textbook but consists of simply access codes to the eText and the MasteringBiology website. If you choose to purchase your text elsewhere, you must also purchase access to the MasteringBiology website as you will have graded tutorials, quizzes, and homework as well as many other helpful supplements. Students facing a delay in purchasing MasteringBiology because of a temporary and verifiable financial emergency should contact instructors to avoid losing credit for quizzes and homework.

Course materials: Other course materials (including reading quizzes) will be available within the ANGEL CMS, **myCourses** (<http://my.geneseo.edu>). There is also an information section of new student help guides on their website at: <http://www.geneseo.edu/mycourses>. The MasteringBiology site is linked from MyCourses, along with a guide to getting started.

Evaluation:

Graded Work	Contribution:
Exams (4 in class, including final)	75%
Day-to-Day Activities (including reading quizzes, tutorials, practice tests, and participation)	25%

Day-to-Day activities: One quarter of your grade will come from keeping up with assigned readings, and from being an active participant in class. The day-to-day

component of your grade will consist of online reading quizzes, tutorials, practice tests, and class participation. Each of these components will contribute an equal share to the 25% of your grade (6.25% each).

Reading quizzes: There will be short online quizzes consisting mostly of multiple choice and other objective questions covering each of the assigned chapters in the textbook. Quizzes are found within the MasteringBiology supplement. Quizzes will be taken online within a narrow window of time (a little over 24 hours) prior to the class in which the chapter will be discussed. **The role of the reading quizzes is to ensure that everyone has a common foundation of basic knowledge for class discussion.** This will allow us to use class time for active learning and for the more challenging topics that will better prepare you to take the exams. Reading quizzes therefore emphasize basic terminology and major concepts. Quizzes are set up with a short time limit and a subset of possible questions will be delivered in random order. These features make it harder to take the quiz as a group, or to look up answers in the book if you are not already familiar with the reading. Because reading quizzes are intended to be a self-assessment, they will be graded as an all-or-nothing assignment in which any passing grade (60% or greater) will receive full credit and a failing grade (<60%) will receive no credit. Although deadlines are set in advance, the schedule MAY change, so watch your email and listen for announcements in class.

Tutorials: In addition to the reading quizzes, there are online tutorials set up for you in MasteringBiology. Tutorials are designed to help you shift from a passive style of studying to a more active style. The window for completing these is longer and the tutorials for each chapter are designed to take about an hour to complete on average. Tutorials are open for one quarter of the semester and close two days prior to each quarterly exam.

Practice tests: After completion of a chapter, there is a practice test for each chapter in MasteringBiology. These contain more challenging questions than the reading quizzes. Practice tests (or Post-quizzes), like tutorials will also have a longer window of opportunity for completion. Practice tests are open for one quarter of the semester and close two days prior to each quarterly exam. As with reading quizzes, the schedule may change so watch for updates.

Class participation: Research indicates that class attendance is a strong predictor of performance. Class participation may be recorded either through use of a personal response system using your existing phone, tablet or laptop, or through collection of a work product from the class. Part (but not necessarily all) of the grade will come from completion.

Exams: There will be four exams, each worth the same value for 75% of your final grade (18.75% each). Each exam will cover roughly one-quarter of the course and consist primarily of multiple choice questions. The first three exams will be during class time (see schedule). The fourth quarter exam will be given during the final exam period and will cover only the fourth quarter material. Although there is no comprehensive exam in this class, the material is naturally cumulative, and you will not succeed in learning later topics if you have not mastered earlier topics. For example, understanding ecological biology in the fourth quarter depends on having a good foundation of animal and plant biology learned in the second and third quarters. The schedule of topics may be subject

to change, but the exam dates are fixed. Content coverage on the exams will be adjusted if necessary.

For exams, bring with you #2 pencils and your college identification card. Sit in alternate seats, and do not communicate with students around you once the exam is in progress. You must silence your phone or turn it off, and place it with the display face down where proctors can see it. It is important to arrive on time as you will not get extra time to complete your exam if you arrive late, and you will not be allowed to start the exam once people begin leaving. Be sure that you fill in your name and G00 number correctly on the Scantron form, and put your name on your paper exam. Make sure that you have completed all of the questions before you turn your exam in. We will likely be piloting secure online testing this semester. Be prepared to download and install a copy of the “Respondus LockDown Browser” on your personal laptop. Instructions for installation and use of the secure browser will be provided in class.

Grades: You will be able to track your performance through the semester using the gradebooks in MasteringBiology and MyCourses. Initially, scores for quizzes, tutorials and practice tests will appear in the gradebook in MasteringBiology as you complete them, and periodically (once per quarter), grades will be transferred to MyCourses. You can also use the “reports tab” in MyCourses to get a more detailed look at your progress to date. Grades will follow the following point distribution, usually without adjustment or “curving” and with no quota for particular letter grades:

>93%, A;	77-79%, C+
90-92%, A-	73-77%, C
87-89%, B+	70-72%, C-
83-86%, B	60-69%, D
80-82%, B-	<60%, E

Assistance: There are many ways of obtaining help in Biology 119, but all involve your taking the first step. Here are your options:

Review sessions: Voluntary review sessions will be scheduled throughout the semester. In addition to answering questions based on the lecture material and homework assignments, we can also use the voluntary review sessions to 1) answer any questions that you might have about the reading assignments; 2) assist you with study skills using specific examples drawn from the course material; and 3) discuss test taking strategies. Dates, times, and location will be announced in class.

Tutors: Undergraduate tutors (Biology Majors) are available in the Biology Learning Center (ISC 139) to help students with the course material. The tutoring schedule will be announced in class and posted in the labs and by the instructor’s doors.

Supplemental instruction: Supplemental instruction (SI) will also be available for this class. SI sessions are facilitated by trained peer leaders and will focus on mastery of the content and concepts in Biol 119. SI sessions will be collaborative and active. SI will increase your chances of achieving a better grade in this class by providing guided practice and assistance with studying. Additional information will be provided during the first week of class by the SI leader, Devon Brewster (db14@geneseo.edu).

Office hours: Members of the instructional team have regularly scheduled office hours in order to provide assistance one-on-one or to small groups of students.

Please direct your content questions to the instructor who has lectured on the particular topic and direct questions about general course issues such as making up exams to the instructor currently not lecturing.

Course Goals & Content:

This course has two main objectives; the first is to increase your biological knowledge and prepare a firm foundation of knowledge for the courses that follow and the second is to help you develop the intellectual skills needed for advanced study of biology: to develop the ability to organize information from various disciplines, to fit it into a conceptual framework, to use it in the synthesis of new ideas and to understand how biologists think and approach scientific questions.

Learning outcomes for BIOL 119

Upon completion of this course, through multiple choice exams, quizzes, and In-class personal response questions, students will:

1. Describe the diversity and unity of organisms: identifying characteristics that unify major taxa; and recognizing the relationships among major taxa.
2. Understand the basic structure of the major groups of organisms and how this structure develops.
3. Describe the mechanisms by which organisms interact with their environment in ways that perpetuate life processes.
4. Discuss the basic nutritional needs of organisms and the diverse ways that these needs are met.
5. Demonstrate understanding of the levels of biological organization of living things above the level of cells including: tissues, organs, organ systems, organisms, populations, communities, and ecosystems.
6. Apply knowledge of biological systems to solve novel problems in case studies in and outside of class.
7. Demonstrate adjustment to college expectations through successful independent completion of course requirements including online reading quizzes and in-class Tophat Monocle quizzes.

Important Policies for Biology 119:

Accommodations: SUNY Geneseo and the instructor of this course will make reasonable accommodations for persons with documented physical, emotional or learning disabilities. Students should consult with the Director in the Office of Disability Services (Tabitha Buggie-Hunt, 105D Erwin, tbuggieh@geneseo.edu) and their individual faculty regarding any needed accommodations as early as possible in the semester.

Professionalism: Your choices can affect the learning experiences of other students in the class as well as your own. While this is true for any college class, the problems are especially acute in very large classes like Biology 119. Please arrive on time, stay through class, turn off your cell phone (including vibration mode), and use laptops and other technology only for class-related activities. It is understood that the continuing development of new technology can be beneficial to the process of education. For this reason, laptops and smartphones are permitted for note-taking and viewing classroom materials. Unacceptable classroom use of technology includes, but is not limited to

social media websites, e-mail, playing games, and cell phone photography. These diversions not only reduce your class participation, they can also distract those around you. If you disrupt the lecture or are distracting others around you, you may be asked to leave and forfeit your participation / Personal response grade. If the behavior of other students around you is affecting your learning, let them know, and please tell us.

If you have an emergency for which you need your cell phone to be turned on, talk to the instructor before the beginning of the lecture and to be excused from this rule. Only then will you not be asked to leave if your cell phone rings/vibrates during the lecture period.

Communication: Check your e-mail daily in order to ensure that you receive reminders of what to bring to class, as changes in schedule are sometimes necessary. E-mail is also usually the fastest way to get in touch with us. Because our jobs require that we deal with many students, please include your name and **Biol119** in all e-mails sent to us.

Missing exams: All four exams are required, and making up an exam requires a valid excuse. Examples of valid reasons for missing exams include (but are not limited to) personal illness, death or serious illness in the family, representing the college, religious observances, and required training for work or military service. Where possible, discussion of alternative arrangements should take place ahead of the exam. For emergencies arising on the day of the exam, you need to contact us within 24 hours to arrange an alternative time to take your exam.

Missing quizzes, tutorials, and practice tests: Approximately 25% of the online activities in each category will be dropped. Because some of each will be dropped and because there is a window of 24 hours or more for completion of these, there will not ordinarily be any opportunity to make these up. Use the option to drop quizzes wisely as if you have chosen to miss quizzes but then have a genuine emergency, we will not drop additional quizzes for you. Note that if you complete an item, even if you get most or all of the answers wrong, you will be able to review from it later, but if you do not complete it, you cannot open it later. It is therefore always better to complete the online activities, even with low scores, than to skip them. Please contact us along with the Dean of Students if you will be absent and unable to use the online supplements for more than one week.

Missing class participation: You cannot make up class participation regardless of the reason for your absence; this includes illness, family emergencies and athletic competitions. Approximately 25% of participation scores will be dropped. Because a portion of your participation grade comes from participation alone, irrespective of whether your answers are correct, you are always better off showing up and trying even when you are less prepared than would be ideal. Please contact us along with the Dean of Students if you will be absent for longer than one week. Again, use the option to drop participation scores wisely as if you have chosen to miss classes and then have an emergency that requires an extended absence, we will not drop extra scores.

Appealing grades: Any graded work may be submitted for re-evaluation along with a written appeal. The basis for your appeal will usually be either (1) ambiguity in class notes or reading materials, or (2) ambiguity in the test question. The appeal should contain a brief written explanation of your concerns, including your reading of the ambiguous written material, and why you answered the question the way that you did.

Appeals should be turned in within one week of receiving the graded work. When you submit your written appeal, we will schedule an individual conference to discuss it.

Academic dishonesty: Academic dishonesty includes both cheating on exams and quizzes as well as misrepresenting your identity for exams or for class participation. Cheating here refers to violating the rules of quizzes and exams, including collaboration or copying from other students' work. Misrepresenting your identity includes using another student's personal response system, or having another person use yours, or sending another person to take your exam. The penalty for cheating or misrepresenting your identity will be a grade of zero on the assignment score, quiz or exam involved. Because academic dishonesty is defined in detail here, claiming ignorance of the policies cannot serve as an excuse.

Policy exceptions: Policies are designed to address common issues and concerns. We cannot anticipate every possible problem that may arise, and therefore policies can have limits and exceptions! If you are experiencing problems in completing class work for any reason, please drop by office hours or make an appointment to talk with one of us.

Important dates to keep in mind;

Feb. 10	Exam 1	Apr. 6	Exam 3
Mar. 7	Midsemester	May 2	Last day of class
Mar. 7	Exam 2	May 11	Final Exam 12:00 to 2:30 PM, Newton 202
Apr. 4	Last day to withdraw		
Mar. 14 - 18	Spring Break - no classes		

VERY IMPORTANT INFORMATION ABOUT POLICIES FOR THE BIOLOGY MAJOR:

Students entering Geneseo in and after the Fall of 2013 (either as incoming freshman or as transfer students) and students wishing to become Biology/Biochemistry majors in the Fall of 2013 or later are 'premajors' in Biology/Biochemistry. To be able to declare a major in Biology/Biochemistry, premajors must first earn **at least a C+ average** (2.3 GPA) in their **first two Required biology lecture** courses **taken at Geneseo**. For most students this would be BIOL 117 and 119. Students unsure of their readiness for college science may choose to start with BIOL 105/106 as a preparatory course before taking BIOL 117/119.

If students have credit for BIOL 117/119 (from an AP Biology score of 5 or from the transfer of college credits) the first two required courses (and the ones that will count in terms of advancing to the major) are: BIOL 203 and 222 (for pre-Biology majors) or BIOL 222 and 300 (for pre-Biochemistry majors). Pre-Biology students who have credit for 117, 119, 203 and 222 and pre-Biochemistry students with credit for 117, 119 and 222 will be evaluated on the basis solely of BIOL 300.

[Note that although you can repeat courses if you withdraw or earn a D or E you **cannot** repeat courses with a C- or C and earning these grades in a 'premajor course' makes it difficult to achieve a C+ average and to become a Biology/Biochemistry major.]

General Biology: Diversity; Physiology; Ecology- BIOL. 119 (02), CRN# 54962
MWF 12:30-1:20, Instructors: Drs. Feissner and McCartney
Course Outline, Spring 2016

Class Schedule	Date	Chapters (Subject to adjustment)	Instructor
1.	January 20	Introduction / Syllabus / Schedule / Policies	Dr. Feissner
2.	January 22	Ch. 29 – Bacteria and Archea	“
3.	January 25	Ch. 29/30 – Bacteria continued / Protists	“
4.	January 27	Ch. 30 – Protists	“
5.	January 29	Ch. 31 – Green algae and Land Plants	“
6.	February 1	Ch. 31 – Green algae and Land Plants	“
7.	February 3	Ch. 32 – Fungi	“
8.	February 5	Ch. 32 – Fungi	“
9.	February 8	Ch. 37 – Plant Form and Function	“
10.	February 10	Exam I	“
11.	February 12	Ch. 37 – Plant Form and Function	“
12.	February 15	Ch. 37 – Plant Form and Function	“
13.	February 17	Ch. 38 – Water and Sugar Transport in Plants	“
14.	February 19	Ch. 38 – Water and Sugar Transport in Plants	“
15.	February 22	Ch. 39 – Plant Nutrition	“
16.	February 24	Ch. 40 – Plant Sensory Systems, Signals, and Responses	“
17.	February 26	Ch. 40 – Plant Sensory Systems, Signals, and Responses	“
18.	Feb 29	Ch. 41 – Plant Reproduction	“
19.	March 2	Ch. 33 – An Introduction to Animals	McCartney
20.	March 4	Ch. 34 – Protostome Animals	“
21.	March 7	Exam II	“
22.	March 9	Ch. 34 – Protostome Animals	“
22.	March 11	Ch. 35 –Deuterostome Animals	“
24.	March 14	no class	-
25.	March 16	no class	-
26.	March 18	no class	-
27.	March 21	Ch. 35 – Deuterostome Animals	McCartney
28.	March 23	Ch. 42 – Animal Form and Function	“
29.	March 25	Ch. 43 – Water and Electrolyte Balance in Animals	“
30.	March 28	Ch. 43 – Water and Electrolyte Balance in Animals	“
31.	March 30	Ch. 46 – Animal Nervous Systems	“
32.	April 1	Ch. 47 – Animal Sensory Systems	“
33.	April 4	Ch. 48 – Animal Movement	“
34.	April 6	Exam III	“
35.	April 8	Ch. 45 – Gas Exchange	“
36.	April 11	Ch. 45 – Gas Exchange	“
37.	April 13	Ch. 50 – Reproduction	“
38.	April 15	Ch. 50 – Reproduction	“
39.	April 18	Ch. 52 – An Introduction to Ecology	Dr. Feissner
40.	April 20	Ch. 52/54– Population Ecology	“
41.	April 22	Ch. 55 – Community Ecology	“
42.	April 25	Ch. 55 – Community Ecology	“
43.	April 27	Ch. 56 – Ecosystems and Global Ecology	“
44.	April 29	Ch. 56 – Ecosystems and Global Ecology	“
45.	May 2	Ch. 57 – Biodiversity and Conservation Biology	“
46.	May 11	Final Exam - Exam IV 12:00-2:30 PM, Newton 202	-

BIOL. 119 (02) - MasteringBiology Assignment Schedule - Spring 2016

All assignments open at 8:00 AM on the starting date and close at 12:00 Noon on the date at the end of the window.

Lecture Date	Chapters (Subject to adjustment)	Reading Quiz Window (28 hr) (8:00AM – 12:00PM)	Tutorial window Open until 24 hours prior to exam	Practice Test Open until 24 hours prior to exam
1/ 20	Introduction	-----	-----	-----
1/ 22	Ch. 29 – Bacteria and Archea	Jan 21 – Jan 22	Jan 22 – Feb 9	Jan 22 – Feb 9
1/ 25	Ch. 30 – Protists	Jan 24 – Jan 25	Jan 22 – Feb 9	Jan 22– Feb 9
1/ 27	Ch. 30 – Protists	-----	-----	-----
1/ 29	Ch. 31 – Algae and Land Plants	Jan 28 – Jan 29	Jan 22 – Feb 9	Jan 22 – Feb 9
2/ 1	Ch. 31 – Algae and Land Plants	-----	-----	-----
2/ 3	Ch. 32 – Fungi	Feb 2 – Feb 3	Jan 22 – Feb 9	Jan 22 – Feb 9
2/ 5	Ch. 32 – Fungi	Feb 4 – Feb 5	Jan 22 – Feb 9	Jan 22 – Feb 9
2/ 8	Ch. 37 – Plant Form and Function	Feb 6 – Feb 7	Feb 7 – Mar 6	Feb 7 – Mar 6
2/ 10	Exam I	-----	-----	-----
2/ 12	Ch. 37 – Plant Form and Function	Feb 11 – Feb 12	Feb 7 – Mar 6	Feb 7 – Mar 6
2/ 15	Ch. 37 – Plant Form and Function	-----	-----	-----
2/ 17	Ch. 38 – Water Transport	-----	-----	-----
2/ 19	Ch. 38 – Sugar Transport	Feb 18 – Feb 19	Feb 7 – Mar 6	Feb 7 – Mar 6
2/ 22	Ch. 39 – Plant Nutrition	-----	-----	-----
2/ 24	Ch. 40 – Plant Sensory Systems	-----	-----	-----
2/ 26	Ch. 40 – Plant Sensory Systems	Feb 25 – Feb 26	Feb 7 – Mar 6	Feb 7 – Mar 6
2/ 29	Ch. 41 – Plant Reproduction	-----	-----	-----
3/ 2	Ch. 33 – Introduction to Animals	Mar 1 - Mar 2	Feb 7 – Mar 6	Feb 7 – Mar 6
3/ 4	Ch. 34 – Protostome Animals	Mar 3 - Mar 4	Mar 4 – Apr 5	Mar 4 – Apr 5
3/ 7	Exam II	-----	-----	-----
3/ 9	Ch. 34 – Protostome Animals	-----	-----	-----
3/ 11	Ch. 35 –Deuterostome Animals	Mar 10 - Mar 11	Mar 4 – Apr 5	Mar 4 – Apr 5
3/ 14	no class	-----	-----	-----
3/ 16	no class	-----	-----	-----
3/ 18	no class	-----	-----	-----
3/ 21	Ch. 35 – Deuterostome Animals	Mar 20 - Mar 21	Mar 4 – Apr 5	Mar 4 – Apr 5
3/ 23	Ch. 42 – Animal Form and Funct.	-----	-----	-----
3/ 25	Ch. 43 – Water and Electrolytes	Mar 24 - Mar 25	Mar 4 – Apr 5	Mar 4 – Apr 5
3/ 28	Ch. 43 – Water and Electrolytes	-----	-----	-----
3/ 30	Ch. 46 – Nervous Systems	Mar 29 – Mar 30	Mar 4 – Apr 5	Mar 4 – Apr 5
4/ 1	Ch. 47 – Animal Sensory Systems	-----	-----	-----
4/ 4	Ch. 48 – Animal Movement	Apr 3 - Apr 4	Apr 4 – May 10	Apr 4 – May 10
4/ 6	Exam III	-----	-----	-----
4/ 8	Ch. 45 – Gas Exchange	-----	-----	-----
4/ 11	Ch. 45 – Gas Exchange	-----	-----	-----
4/ 13	Ch. 50 – Reproduction	-----	-----	-----
4/ 15	Ch. 50 – Reproduction	Apr 14 - Apr 15	Apr 4 – May 10	Apr 4 – May 10
4/ 18	Ch. 52 – Introduction to Ecology	Apr 17 - Apr 18	Apr 4 – May 10	Apr 4 – May 10
4/ 20	Ch. 54– Population Ecology	-----	-----	-----
4/ 22	Ch. 55 – Community Ecology	Apr 21 - Apr 22	Apr 4 – May 10	Apr 4 – May 10
4/ 25	Ch. 55 – Community Ecology	Apr 24 - Apr 25	Apr 4 – May 10	Apr 4 – May 10
4/ 27	Ch. 56 – Ecosystems	Apr 26 - Apr 28	Apr 4 – May 10	Apr 4 – May 10
4/ 29	Ch. 56 – Ecosystems	-----	-----	-----
5/ 2	Ch. 57 – Biodiversity	May 1 - May 2	Apr 4 – May 10	Apr 4 – May 10
5/ 11	Exam IV 12:00-2:30 PM	-----	-----	-----