General Biology: diversity; physiology; ecology- BIOL. 119 (01), CRN# 50064 MWF 9:30-10:20, Instructors: Drs. O'Donnell and Yang Course Outline, Spring 2018 Prerequisites Biol 117

Day/Lecture	Date	Chapters	Instructor
1	17-Jan-2018	Ch. 32 – An Overview of Animal Diversity	Dr. O'Donnell
2	19-Jan-2018	Ch. 32, 33 –An Introduction to Invertebrates	"
3	22-Jan-2018	Ch. 33 – An Introduction to Invertebrates	"
4	24-Jan-2018	Ch. 33 – An Introduction to Invertebrates	"
5	26-Jan-2018	Ch. 34 – The Origin and Evolution of Vertebrates	"
6	29-Jan-2018	Ch. 34 – The Origin and Evolution of Vertebrates "	
7	31-Jan-2018	Ch. 34 – The Origin and Evolution of Vertebrates "	
8	2-Feb-2018	Ch. 40 – Basic Principles of Animal Form and Function	"
9	5-Feb-2018	Ch. 42 – Circulation "	
10	7-Feb-2018	Ch. 42 – Gas Exchange	"
11	9-Feb-2018	Exam I (32-34, 40, 42.1-42.4)	"
12	12-Feb-2018	Ch. 43 – The Immune System	
13	14-Feb-2018	Ch. 43, 44 – Osmoregulation	"
14	16-Feb-2018	Ch. 44 – Excretion	"
15	19-Feb-2018	Ch. 44, 45 – Hormones and the Endocrine System	"
16	21-Feb-2018	Ch. 45, 46 – Animal Reproduction	"
17	23-Feb-2018	Ch. 46, 47 – Animal Development "	
18	26-Feb-2018	Ch. 47, 48 – Neurons, Synapses and Signaling	"
19	28-Feb-2018	Ch. 48 – Neurons, Synapses and Signaling "	
20	2-Mar-2018	Ch. 48, 49 – Nervous systems	"
21	5-Mar-2018	Ch. 50 – Sensory and Motor Mechanisms (muscle and bone only)	"
22	7-Mar-2018	Exam II (42.5-50)	66
23	9-Mar-2018	Ch. 31 – Biodiversity: Fungi	Dr. Yang
	12-Mar-2018	no class	
	14-Mar-2018	no class	
	16-Mar-2018	no class	
24	19-Mar-2018	Ch. 28 – Biodiversity: Protists	"
25	21-Mar-2018	Ch. 29, 30 – Biodiversity: Plants I "	
26	23-Mar-2018	Ch. 29, 30 – Biodiversity: Plants II	"
27	26-Mar-2018	Ch. 35 – Plant structure I "	
28	28-Mar-2018	Ch. 35 – Plant structure II	"
29	30-Mar-2018	Ch. 36, 37 – Plant transport and nutrition I	"
30	2-Apr-2018	Ch. 36, 37 – Plant transport and nutrition II	
		Last Day to Withdraw	
31	4-Apr-2018	Ch. 36, 37 – Plant transport and nutrition III "	
32	6-Apr-2018	Ch. 38 – Angiosperm reproduction "	
33	9-Apr-2018	Exam III (28-31, 35-38)	

43	4-May-2018	Exam IV (39, 52-56) (Tues., 8:00-10:30) Newton 202	"
42	30-Apr-2018	Ch. 56 – Conservation biology	"
41	27-Apr-2018	Ch. 55 – Ecosystem ecology	"
40	25-Apr-2018	Ch. 54 – Community ecology	"
39	23-Apr-2018	Ch. 53, 54 – Population & Community ecology	"
38	20-Apr-2018	Ch. 53 – Population ecology	"
37	18-Apr-2018	Ch. 52 – Biosphere II	"
36	16-Apr-2018	Ch. 52 – Biosphere I	"
35	13-Apr-2018	Ch. 39 – Plant responses II	66
34	11-Apr-2018	Ch. 39 – Plant responses I	"

A. PREREQUISITES Biol 117

B. TEXTBOOK: Campbell Biology

Campbell Biology + Modified Mastering Biology With E text Access Card.

Authors: Lisa A. Urry, Michael L. Cain, Peter Minorsky, Steven A. Wasserman and Jane Reece

Publisher: Benjamin-Cummings Publishing Company Edition: 11th

ISBN: 9780134683461 for the textbook plus Modified Mastering with etext The Modified MasteringBio with etext is 9780134454702

Both the textbook and modified mastering biology (access to an on-line biology study site) are required. If you buy a used book, you will need to purchase the modified mastering code directly from the Pearson web site.

There are several options and prices vary widely depending on new versus used, campus bookstore versus online, whether you intend to keep it or sell it back. If you are switching from Freeman book (Biol 11702 or Biol 117 03) and had an access code for mastering we will be able to get you one for Campbell at no cost to you.

C. COURSE MATERIALS: course materials will be available within the Course Management System, **CANVAS.** There is also an information section of new student help guides on their website at:

https://wiki.geneseo.edu/display/cit/Canvas+Tips+for+Geneseo+Students

D. INSTRUCTORS: Dr. Robert W. O'Donnell Dr. Suann Yang

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Office hours: M, W, F 10:30-11:20, T 1:30 -2:30

T, R 1-2:00 W, F 10:30-11:50

other times by appointment other times by appointment

- **E. REVIEW SESSIONS:** Voluntary review sessions every Monday afternoon at 3:30pm-4:20 pm in Newton 201 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.
- **F. ASSIGNMENTS:** Topics will be covered as listed in the course outline. The reading assignments should be skimmed before the topic is covered in lecture. This means that you are not expected to have understood and memorized all the material in the reading, but you should be familiar with the major themes and vocabulary. Material from both the lectures and readings will be tested on the exams. Associated with each chapter are assignments in Mastering Biology that are due at the completion of each chapter. The calendar in Mastering will list when an assignment will open and when it is due. The lowest two Mastering assignments will be dropped **but this means we will not accept late Mastering assignments!**

G. GRADING:

Exams 1-3 and Mastering Assignments, top three will be counted = 67.5% of your grade (100 points per exam

and 100 points from Mastering chapter assignments)

Exam 4 = 22.5% of your grade (100 points)

Top Hat participation points = 5% of your grade (1 point per day)

Top Hat accuracy points = 5% of your grade (1 point per day)

Total $= \frac{5\% \text{ of your grade } (1 \text{ points})}{100\%}$

Exams 1-3 and Mastering Assignments will account for 67.5% of your final grade. We will drop the lowest of the three exams or the total Mastering Assignments score. **There will be no make-up exams. If you miss an exam that will be the grade that is dropped.** For example, if a student earns 75% on Exam I, 80% on Exam II, 80% on Exam III, and 90% on the Mastering Assignments, we will drop the 75% score from Exam I. Each exam will cover roughly one-quarter of the course and consist of roughly 45 multiple-choice questions. The first three exams will be during class time (see syllabus). The fourth exam is non-cumulative and will be given during the final exam period and will cover only the fourth quarter material; the score of that exam cannot be dropped. Top Hat points will be worth 10% of your final grade and will be based on participation and the accuracy of your answers. One Top Hat

participation score will be dropped each half and the lowest one-third of your Top Hat accuracy scores in each quarter will be dropped. A current average of your Top Hat points will be kept for you in Canvas. Because your grades will be posted in Canvas (including your overall average) it will be your responsibility to check how you are doing in the course as the semester progresses.

H. THE USE AND GRADING POLICY OF "EMBEDDED CLASS QUSTIONS USING TOP HAT":

A Top Hat account will be provided to you at no cost. You will just need a phone or computer to answer questions when you are in class. Within the Top Hat grading, four Top Hat classes can be missed with no detrimental effect on Top Hat participation points. Because the lowest third of Top Hat accuracy points are not incorporated in the calculation for Top Hat accuracy, missed classes will also have little effect on one's grade unless the number of classes missed is significant and the Top Hat accuracy in the classes attended is poor.

I. Grading Scale

Letter grades will be awarded based on the following point distribution:

A 92.5-100%	B+ 86.5-89.49	C+ 76.5-79.49	D 59.5-69.49
A- 89.5- 92.49	В 82.5- 86.49	C 72.5- 76.49	E <59.5
	B- 79.5-82.49	C- 69.5-72.49	

TUTORS: Undergraduate tutors (Biology Majors) are available to help students with the course material. For more information see the Biology Tutoring web page at: http://www.geneseo.edu/biology/tutoring. Supplemental instruction (SI) will also be available for this class and information will be provided during the first week of class by the SI leader.

J. Accommodations: SUNY Geneseo will make reasonable accommodations for persons with documented physical, emotional, or cognitive disabilities. Accommodations will also be made for medical conditions related to pregnancy or parenting. Students should contact Dean Buggie-Hunt in the Office of Disability Services (tbuggieh@geneseo.edu or 585-245-5112) and their faculty to discuss needed accommodations as early as possible in the semester.

K. Learning Outcomes for Biol. 119

Upon completion of this course students will be able to:

- 1. Describe the diversity and unity of organisms: identifying characteristics that unify major taxa; and recognizing the relationships among major taxa.
- 2. Reconstruct 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.
- 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. Discuss factors that determine the distribution and abundance of organisms.
- 7. Apply knowledge of biological systems to solve novel problems in case studies in and outside of class.
- 8. Identify important biological concepts from independent reading assignments and case studies.

L. Academic Dishonesty:

Academic dishonesty in any form will not be tolerated. Only students who are present during class may participate in Top Hat questions. It is not appropriate to participate in Top Hat questions when not in class or helping students to answer Top Hat questions when they are not in class. Please consult the undergraduate bulletin for more information regarding the College's academic dishonesty policies.

M. BIOLOGY PRE-MAJOR:

Students entering Geneseo in the fall of 2013 and thereafter (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 <u>at least a C+ average</u> (2.3 GPA) in their <u>first two required biology lecture</u> courses <u>taken at Geneseo</u>. For most students this will 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. (Note that although you can repeat courses if you

withdraw or earn a D or E you <u>cannot</u> 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.)

N. Piazza:

This term we will be using Piazza for class discussion. The system is highly catered to getting you help fast and efficiently from classmates, the SIs, and your instructors. Rather than emailing questions to the teaching staff, I encourage you to post your questions on Piazza. If you have any problems or feedback for the developers, email team@piazza.com.

Enroll in Piazza and access our course using the navigation menu in Canvas.