

General Biology: diversity; physiology; ecology- BIOL. 119 (01), CRN# 50064
MWF 9:30-10:20, Instructors: Drs. O'Donnell and Spear
Course Outline, Spring 2016
Prerequisites Biol 117

Day/Lecture	Date	Chapters	Instructor
1	20-Jan-16	Ch. 28 – Biodiversity: Protists – algae	Dr. Spear
2	22-Jan-16	Ch. 31 – Biodiversity: Fungi	“
3	25-Jan-16	Ch. 32 – Animal Diversity	Dr. O'Donnell
4	27-Jan-16	Ch. 32, 33 – Invertebrates	“
5	29-Jan-16	Ch. 33 – Invertebrates	“
6	1-Feb-16	Ch. 33 – Invertebrates (assignment #1 due)	“
7	3-Feb-16	Ch. 34 – The Origin and Evolution of Vertebrates	“
8	5-Feb-16	Ch. 34 – The Origin and Evolution of Vertebrates	“
9	8-Feb-16	Ch. 34 – The Origin and Evolution of Vertebrates (assignment #2 due)	“
10	10-Feb-16	Ch. 40 – Basic Principles of Animal Form and Function	“
11	12-Feb-16	Exam I (28, 31-34, 40)	“
12	15-Feb-16	Ch. 42 – Circulation	“
13	17-Feb-16	Ch. 42 – Gas Exchange	“
14	19-Feb-16	Ch. 43 – Immunity	“
15	22-Feb-16	Ch. 43, 44 – Osmoregulation	“
16	24-Feb-16	Ch. 44 – Excretion (<i>assignment #3 due</i>)	“
17	26-Feb-16	Ch. 44, 45 – Hormones	“
18	29-Feb-16	Ch. 45, 46 – Reproduction	“
19	2-Mar-16	Ch. 46, 47 – Development (<i>assignment #4 due</i>)	“
20	4-Mar-16	Ch. 47, 48 – Neurons, Synapses and Signaling	“
21	7-Mar-16	Ch. 48 – Neurons, Synapses and Signaling	“
22	9-Mar-16	Ch. 48, 49 – Nervous systems	“
23	11-Mar-16	Ch. 50 – Sensory and Motor Mechanisms (muscle and bone only)	“
24	14-Mar-16	no class	
25	16-Mar-16	no class	
26	18-Mar-16	no class	
27	21-Mar-16	Exam II (42-50)	Dr. O'Donnell
28	23-Mar-16	Ch. 29 – Biodiversity: Plants – seedless	Dr. Spear
29	25-Mar-16	Ch. 30 – Biodiversity: Plants – “naked seeds”	“
<u>Last Day to Withdraw</u>			
30	28-Mar-16	Ch. 30 – Biodiversity: Plants – flowers/fruits	“
31	30-Mar-16	Ch. 35 – Plant structure – primary growth <i>(assignment #5 due)</i>	“
32	1-Apr-16	Ch. 35 – Plant structure – secondary growth	“
33	4-Apr-16	Ch. 36 – Plant function: transport	“
34	6-Apr-16	Ch. 37 – Plant function: transport/nutrition	“
35	8-Apr-16	Ch. 38 – Plant reproduction	“

<i>(assignment #6 due)</i>			
36	11-Apr-16	Exam III (29-30, 35-37)	
37	13-Apr-16	Ch. 39 – Plant responses	“
38	15-Apr-16	Ch. 39 – Plant responses	“
39	18-Apr-16	Ch. 52 – Ecology/biosphere	“
40	20-Apr-16	Ch. 52 – Ecology/biosphere <i>(assignment #7 due)</i>	“
41	22-Apr-16	Ch. 53 – Population ecology	“
42	25-Apr-16	Ch. 54 – Population & Community ecology	“
43	27-Apr-16	Ch. 55 – Community ecology	“
44	29-Apr-16	Ch. 55 – Ecosystem ecology <i>(assignment #8 due)</i>	“
45	2-May-16	Ch. 56 – Conservation/global change	“
46	10-May-16	Exam IV (39, 52-56) (Tues., 8:00-10:30) Newton 202	Dr. Spear

A. PREREQUISITES

Biol 117

C. TEXTBOOK: Campbell Biology

Campbell Biology + Mastering Biology With E text Access Card.

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

Publisher: Benjamin-Cummings Publishing Company, Edition: 10th

ISBN: 0321775848

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

1) Campbell Biology (hard bound) Plus mastering biology with eText -- Access Card Package (10th Edition) by Jane B. Reece and Lisa A. Urry ISBN 0321775848, \$199.94 from amazon.com and barnesandnoble.com, \$277.05 from campus book store

2) Campbell Biology (loose leaf) Plus Mastering Biology with eText -- Access Card Package (10th Edition) Loose Leaf: ISBN 0133922855 \$140.90 from amazon.com and barnesandnoble.com; \$190.65 from campus book store

3) mastering biology code with E-Book from Pearson's web site (if you don't need a hard copy and like to read on your computer): ISBN 0321833147 \$111.50

4) mastering code only from Pearson's web site if you purchase a used book that lacks a mastering code: ISBN 0321833147 \$66.00

C. INSTRUCTORS:	Dr. Robert W. O'Donnell	Dr. Ray W. Spear
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Telephone:	245-5313	245-5311
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Internet Address:	odonnell@geneseo.edu	spear @geneseo.edu
Office hours:	M, W, F 10:30-11:20, T, R 1-2:00	M 10:30 -11:20 & 2:30-3:20 W 3:45-5:00 F 12:30-1:20
	other times by appointment	other times by appointment

D. Course Materials: course materials will be available within the ANGEL CMS, **myCourses**.

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. The assignments are recommended to be done prior to taking the quiz on line in myCourses since several of the questions will be taken directly from the Mastering assignments.

G. GRADING:

Exams 1-4	= 75% of your grade (100 points per exam)
Homework quizzes	= 15% of your grade (10 points per assignment)
Top Hat participation points	= 5% of your grade (1 point per day)
Top Hat accuracy points	= <u>5% of your grade</u> (1 point per day)
Total	100%

There will be four exams, each worth the same (100 points/exam, 400 total) for 75% of your final grade. 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. 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 myCourses. The remaining 15% of your final grade will come from the eight quizzes taken in myCourses. Because your grades will be posted in myCourses (including your overall average) it will be your responsibility to check how you are doing in the course as the semester progresses. This can be done by using the “Report Tab” in myCourses. The “Report Tab” includes common course tools to help you track your course progress, grades, and more. Click Learner Profile to see an analysis of your activity, submissions, and grades and compare them with the class average. “Grades” allows you to check your grades for all assignments and provides a cumulative grade at any point of the semester.

H. THE USE AND GRADING POLICY OF “EMBEDDED CLASS QUESTIONS 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 during the 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	B 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.

K 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](tel:585-245-5112)) and their faculty to discuss needed accommodations as early as possible in the semester.

L. 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.

M. Academic Dishonesty:

Academic dishonesty in any form will not be tolerated. You are allowed to collaborate on the homework assignments but each individual must write up their own assignments. Copying another person’s homework assignments is not allowed nor is cutting and pasting information found on the internet. If you find relevant information on the Internet you must reference it. You may use your homework assignment on the quizzes, but

the quizzes must be done alone. If there is a problem with your on-line quiz you may be asked to produce your homework assignment (within that day). The use of more than one “clicker” by one person (one student brings a friend’s clicker to class) is also considered academic dishonesty and will be reported. Please consult the undergraduate bulletin for more information regarding the College’s academic dishonesty policies.

N. 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 **at least a C+ average** (2.3 GPA) in their **first two required biology lecture** courses **taken at Geneseo**. 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 **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.)

Tests 1 and 2 (Dr. O’Donnell)

The homework quiz opens in myCourses at 1:00 pm on the first date listed. The quiz must be completed by 9:00 am the next morning.

Weeks of Jan. 20– Feb. 1 (Quiz Jan. 31- Feb. 1)

Chapters 28, 31-33: available within **Mastering Biology**

Weeks of Feb. 1– Feb. 8 (Quiz Feb. 7-8)

Chapter 34: available within **Mastering Biology**

Weeks of Feb. 12 – Feb. 24 (Quiz Feb. 23-24)

Chapter 42, Chapter 43 and chapter 44 (osmoregulation): available within **Mastering Biology**

Weeks of Feb. 24 – Mar. 2 (Quiz Mar1.-Mar. 2)

Chapter 44 (excretion), Chapter 45 and Chapter 46: available within **Mastering Biology**

Tests 3 and 4 (Dr. Spear)

The homework quiz opens in myCourses at 1:00 pm on the first date listed. The quiz must be completed by 9:00 am the next morning.

Weeks of Mar. 21 – Mar. 30 (Quiz Mar. 29-30)

Chapters 28, 29, & 30: available within **Mastering Biology**

Weeks of Mar. 30 – Apr. 8 (Quiz Apr. 7-8)

Chapters 31, 35, 36, & 37: available within **Mastering Biology**

Weeks of Apr. 8 – Apr. 20 (Quiz Apr. 19-20)

Chapters 38, 39, & 52: available within **Mastering Biology**

Week of Apr. 22- Apr. 29 (Quiz Apr. 28- Apr. 29)

Chapters 52, 53, 54, & 55: available within **Mastering Biology**