

**General Biology: diversity; physiology; ecology- BIOL. 119 (01), CRN# 50064**  
**MWF 9:30-10:20, Instructors: Drs. O'Donnell and Spear**  
**Course Outline, Spring 2015**  
**Prerequisites Biol 117**

Class Schedule	Chapters (Subject to adjustment)	Instructor
1. January 21, 2015	Ch. 32 – Animal Diversity	Dr. O'Donnell
2. January 23, 2015	Ch. 32, 33 – Invertebrates	“
3. January 26, 2015	Ch. 33 – Invertebrates	“
4. January 28, 2015	Ch. 33 – Invertebrates	“
5. January 30, 2015	Ch. 34 – The Origin and Evolution of Vertebrates ( <i>assignment #1 due</i> )	“
6. February 2, 2015	Ch. 34 – The Origin and Evolution of Vertebrates	“
7. February 4, 2015	Ch. 34 – The Origin and Evolution of Vertebrates	“
8. February 6, 2015	Ch. 40 – Basic Principles of Animal Form and Function ( <i>assignment #2 due</i> )	“
9. February 9, 2015	Ch. 42 – Circulation, Gas Exchange	“
10. February 11, 2015	Ch. 42 – Gas Exchange	“
<b>11. February 13, 2015</b>	<b>Exam I (32-34, 40, 42, (circulation))</b>	“
12. February 16, 2015	Ch. 43 – Immunity	“
13. February 18, 2015	Ch. 43, 44 – Osmoregulation	“
14. February 20, 2015	Ch. 44 – Excretion ( <i>assignment #3 due</i> )	“
15. February 23, 2015	Ch. 44, 45 – Hormones	“
16. February 25, 2015	Ch. 45, 46 – Reproduction	“
17. February 27, 2015	Ch. 46, 47 – Development ( <i>assignment #4 due</i> )	“
18. March 2, 2015	Ch. 47, 48 – Neurons, Synapses and Signaling	“
19. March 4, 2015	Ch. 48 – Neurons, Synapses and Signaling	“
20. March 6, 2015	Ch. 48, 49 – Nervous systems	“
21. March 9, 2015	Ch. 50 – Sensory and Motor Mechanisms (muscle and bone only)	“
<b>22. March 11, 2015</b>	<b>Exam II (43-50)</b>	Dr. O'Donnell
23. March 13, 2015	Ch. 28 – Biodiversity: Protists – algae	Dr. Spear
24. March 16, 2015	no class	
25. March 18, 2015	no class	
26. March 20, 2015	no class	
27. March 23, 2015	Ch. 29 – Biodiversity: Plants – seedless	“
28. March 25, 2015	Ch. 30 – Biodiversity: Plants – “naked seeds”	“
29. March 27, 2015	Ch. 30 – Biodiversity: Plants – flowers/fruits	“
	<b><u>Last Day to Withdraw</u></b>	
30. March 30, 2015	Ch. 31 – Biodiversity: Fungi ( <i>assignment #5 due</i> )	“
31. April 1, 2015	Ch. 35 – Plant structure – primary growth	“
32. April 3, 2015	Ch. 35 – Plant structure – secondary growth	“
33. April 6, 2015	Ch. 36 – Plant function: transport	“
34. April 8, 2015	Ch. 37 – Plant function: transport/nutrition	“
35. April 10, 2015	Ch. 38 – Plant reproduction ( <i>assignment #6 due</i> )	“
<b>36. April 13, 2015</b>	<b>Exam III (28-31, 35-37)</b>	“
37. April 15, 2015	Ch. 39 – Plant responses	“
38. April 17, 2015	Ch. 39 – Plant responses	“
39. April 20, 2015	Ch. 52 – Ecology/biosphere	“
40. April 22, 2015	Ch. 52 – Ecology/biosphere ( <i>assignment #7 due</i> )	“
41. April 24, 2015	Ch. 53 – Population ecology	“
42. April 27, 2015	Ch. 54 – Population & Community ecology	“
43. April 29, 2015	Ch. 55 – Community ecology	“
44. May 1, 2015	Ch. 55 – Ecosystem ecology ( <i>assignment #8 due</i> )	“
45. May 4, 2015	Ch. 56 – Conservation/global change	“
<b>46. May 13, 2015 (Wed., 8:00-11:00)</b>	<b>Exam IV (39, 52-56)</b> <b>8:00-11:00 am, Newton 202</b>	Dr. Spear

## A. PREREQUISITES

**Biol 117**

## B. 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

**\*\*Required:**

Both the textbook and 'mastering biology' are required. There are three options:

Hardbound text with Mastering :

ISBN 0321775848 Net price \$ 182.80

Loose-leaf text with Mastering :

ISBN 0133922855 Net price \$ 122.35

Mastering code only with E-Book:

ISBN 0321833147 Net price \$ 100.00

## C. INSTRUCTORS: Dr. Robert W. O'Donnell

Office:

ISC 355

Telephone:

245-5313

Campus E-mail

odonnell

Internet Address:

odonnell@geneseo.edu

Office hours:

M, W, F 10:30-11:20,  
T, R 11:30 -12:20

other times by appointment

## Dr. Ray W. Spear

ISC 256

245-5311

spear

spear @geneseo.edu

M 10:30 -11:20 & 2:30-3:20

W 3:45-5:00

F 12:30-1:20

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 203.

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

= 5% of your grade (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, two 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:

- > 93% - A
- 90-92% - A-
- 87-89% - B+
- 83-86% - B
- 80-82% - B-
- 77-79% - C+
- 73-76% - C
- 70-72% - C-
- 60-69% - D
- < 60% - E

**J. 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](mailto: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. 21– Jan. 30 (Quiz Jan. 29- Jan. 30)**

Chapters 32 and 33: available within **Mastering Biology**

**Weeks of Jan. 30– Feb. 6 (Quiz Feb. 5-6)**

Chapter 34: available within **Mastering Biology**

**Weeks of Feb. 16 – Feb. 20 (Quiz Feb. 19-20)**

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

**Weeks of Feb. 23 – Feb. 27 (Quiz Feb. 26-Feb. 27)**

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. 23 – Mar. 30 (Quiz Mar. 29-Mar. 30)**

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

**Weeks of Mar. 30 – Apr. 8 (Quiz Apr. 9-10)**

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

**Weeks of Apr. 10 – Apr. 22 (Quiz Apr. 21-22)**

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

**Week of Apr. 24 - May 1 (Quiz Apr. 30-May 1)**

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