

Instructor: Dr. Ann Kohlhaas

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office hours: Mon & Wed 1:30-3:00pm, and by appt.

Lecture: 8 – 8:50 am in N101

Text: Campbell Biology in Focus (2016, 2nd ed.)

by Urry, Cain, Wasserman, Minorsky, and Reece

Other required material: iClicker +

Purpose: To study organismal diversity, including evolution, phylogeny and classification, form and function, and ecology.

Tentative Lecture Outline and General Reading Assignments:

<u>Date</u>	<u>Lecture</u>	<u>Reading</u>
Jan 27	Introduction to Course	

Jan 30	Deep Time: History of Earth	Table 23.1
Feb 1	Origin of Life	24.1
Feb 3	Evolution Basics	21

Feb 6	Evolution Evidence	23
Feb 8	Phylogeny and Classification	20
Feb 10	(cont.)	

Feb 13	Prokaryotes	24.2-24.5
Feb 15	(cont.)	
Feb 17	(cont.)	

Feb 20	EXAM 1 (100 pts.)	
Feb 22	Protists	25
Feb 24	(cont.)	

Feb 27	Early Plants	26.1, 26.3
March 1	(cont.)	
March 3	(cont.)	

March 6	Seed Plants	26.4, 26.5, 30.1
March 8	(cont.)	
March 10	(cont.)	

March 13	(cont.)	
March 15	EXAM 2 (100 pts.)	
March 17	Fungi	26.2

March 20 - 24	SPRING BREAK – NO CLASSES	

Tentative Lecture Outline and General Reading Assignments (cont.)

<u>Date</u>	<u>Lecture</u>	<u>Reading</u>
March 27	Fungi	
March 29	Animal Tissues and Body Plans	27.1-27.3
March 31	NO CLASS	

April 3	Invertebrates	27.3+
April 5	(cont.)	
April 7	(cont.)	

April 10	Invertebrates	27.3+
April 12	(cont.)	
April 14	(cont.)	

April 17	(cont.)	
April 19	EXAM 3 (100 pts.)	
April 21	Deuterostomes	

April 24	Vertebrates	27.4
April 26	(cont.)	
April 28	(cont.)	

May 1	Intro. to Ecology	40.1-40.3
May 3	(cont.)	
May 5	(cont.)	

May 8	Population and Community Ecology	40.4-40.6,41,42,43.4
May 10	(cont.)	
May 12	(cont.)	

May 15	EXAM 4 (100 pts.)	
May 17	Open Topic	

Friday, May 19 8:30 am	FINAL EXAM (100 pts.)	

Reading: Much of the lecture material will come from the chapters as indicated. The book is an excellent reference and gives a very good overall accounting of the topics. I also often add material from outside the chapters. Good lecture notes are the key to doing well in this course.

Exams: Exams will test students' knowledge of material presented in lectures and in assigned readings. The format will be mostly multiple-choice, but may also include definitions, short essay, and fill in the blank questions. **You will need to bring a Scantron 882-E to each exam. It is also imperative that you are on time for exams.**

NOTE: Exams are only given as scheduled. There are no makeup exams. A missed exam will only be excused if there is independently verifiable evidence of a university-approved reason for the absence.

Final Exam: The final exam is comprehensive.

Grades: Grades for this course are based on both lecture and laboratory performance. Your laboratory instructors will provide me your total lab scores and their percentage of the total possible scores at the end of the semester. Overall, lecture will count for 75% of your grade and lab will count for 25% of your grade.

Lecture Grades

Midterm exams (4 x 100 pts. each)	400
Final exam	120
Participation	80
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Total	600

Lecture points will be multiplied by 1.5 and thus the potential lecture total is 900.

Lecture total points 600 x 1.5	900 (75%)
Lab total points	300 (25%)
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Total	1200

Grades will be assigned on a percentage of the possible points earned, thus A = 90+%, B = 80-89%, C = 70-79%, D = 60-69%, F below 59.5%. Notice: There will be no “+” or “-” grades given. Also, if you choose the CR/NC grading option, you should know that a CR (= credit) requires the equivalent of an A, B, or C letter grade. If you decide to change your grading option, you must do so early enough in the semester so that it is listed correctly when I input grades. I cannot change your grading option on the form. Grading option will not be changed after grades have been submitted.

NOTE: Cheating on any exam or in any portion of this course (including lab and including iClicker use) will result in a grade of F in the entire course.

Participation and iClicker use:

The iClicker will be used to check on time attendance and student comprehension of the material. This also encourages you to keep up and should result in better results on the lecture exams. Be sure to bring your iClicker starting January 30 and every day thereafter (excepting exam days). You do not need to register your iClicker with the company, but instead will “register” it directly with me. Only one person can use one iClicker and make sure you use the same one throughout the semester. You can only earn participation points via the iClicker. You will earn one point each day that you come to class on time. You will earn the rest of your participation points by answering questions correctly in lecture.

Extra Credit:

Extra credit can only be earned by extraordinary participation as described above. You will have the opportunity to earn more than 80 participation points. A maximum of 20 extra credit points may be earned.

NOTE:

1. **Cell phones should be OFF during class.** Cell phone use, including texting, in class is both rude and disruptive to your concentration and mine. Research has shown that “multitaskers” have decreased comprehension and accomplishment than “single taskers.” When you are in class, be totally in class. If you have some reason why you need your phone on during a particular class, talk with me before the class.

2. **Audio and video recording of this class are not allowed.** Most of the figures, tables, etc. that will be shown are copyrighted and also in your textbook. Let me know if you have some reason why you think you should have an exception to this.

BIOL 1050/1150

COURSE DESCRIPTION AND OBJECTIVES

Purpose of Course

The purpose of the introductory series is twofold: (1) to introduce students to the breadth of the biological sciences and (2) to help beginning biology majors master the fundamental facts and theories needed for success in subsequent courses.

This course is the second in the two-course series. We will discuss life from the earliest cells to ecosystems. Learning objectives will be met through a combination of Lecture (LE) & Lab (LA) experiences.

Learning Objectives

Students will be able to describe, identify, and/or explain:

- The main ways organisms acquire, store, use and transfer energy. (LE, LA)
- The main ways organisms acquire, transport, process, use and transfer nutrients. (LE, LA)
- How organisms grow and change in appearance and abilities. (LE, LA)
- The main ways that organisms monitor, respond to and are affected by their environments. (LE, LA)
- How organisms are categorized and relationships investigated and analyzed. (LE, LA)
- The evolution of organisms and their diversity. (LE, LA)
- How biology is integrated with other sciences. (LE, LA)

Students will be able to:

- Apply the scientific method to the solution of biologically-based problems. (LA)
- Identify information needs: access, critically evaluate, and apply scientific information. (LE, LA)
- Function effectively and safely in the laboratory and in the field. (LA)
- Use a range of written and oral communication skills. (LE, LA)
- Apply effective learning strategies. (LE, LA)
- Think independently, yet function as a productive member of a team when appropriate. (LE, LA)

Students will:

- Value the process of scientific inquiry as a means of understanding the natural world. (LE, LA)
- Develop an appreciation for biology and its relevance to broader societal issues. (LE, LA)
- Identify with and participate as a member of the scientific community. (LE, LA)
- Conduct themselves and their activities in a professional manner. (LE, LA)