

Biological Science II (BIOL 122—Section 3)
Fall 2019
WALL 318, MWF 12:00 noon - 12:50 PM

Instructor: Dr. John Hutchens

Office: SCI2 207C

Phone: 843-349-2169

E-mail: jjhutch@coastal.edu; I prefer e-mail over phone calls

Office Hours: MWF 10:00 AM – 12:00 noon, by appointment, or just stop by

Course web page: <http://ww2.coastal.edu/jjhutch/bio122.htm>

Prerequisite: BIOL 121

Required text: Urry et al. 2017. Campbell Biology. 11th Edition. Benjamin Cummings.

Course Description from CCU Catalog: An introduction to biological principles for students majoring in biology and related fields of study. Topics include evolution, origin of life, plant and animal development, ecology.

Objectives: BIOL 122 is the second semester of a two-semester introduction to biology for students majoring in biology and related fields of study. I will introduce a variety of topics including evolution, natural selection, plant and animal structure and function, and ecology. This material will give you a foundation for understanding biological systems and doing well in your upper-level courses.

Student Learning Outcomes: Students who successfully complete this course will be able to:

- Understand evolution by natural selection
- Explain how evolutionary theory forms a framework for biological principles
- Interpret phylogenetic trees
- Describe the characteristics and functions of select plant and animal systems
- Explain basic concepts of ecology
- Interpret graphic and tabular data
- Explain the steps involved in the scientific process
- Exhibit skills in comprehension, analysis, and critical thinking
- Write clearly and effectively in scientific style

Grading: Your grade is based on three lecture exams, three homework assignments, classroom participation, and a comprehensive final exam. Exams will consist of multiple-choice questions and short-answer questions about material from both lecture notes and the textbook, and include both factual and analytical types of questions. Analytical questions will require you to apply your biological knowledge as well as interpret data. Homework assignments will require answering questions based on short readings or biological topics in the news. Each exam is worth 100 points and each homework assignment is worth 30 or 35 points. Late assignments will be penalized by 10%. Classroom participation includes attendance and involvement in classroom activities, which may include in-class writing and analysis assignments. Mid-term grades will be assigned based on performance on all preceding assignments.

Point Distribution:

Assignment	Points
Homework	100
Exam 1	100
Exam 2	100
Exam 3	100
Final Exam	100
Participation	30
Total	530

Grading scale:

Grade	%	Point Range
A	90-100	474 - 530
B+	87-89	458 - 473
B	80-86	421 - 457
C+	77-79	405 - 420
C	70-76	368 - 404
D+	67-69	352 - 367
D	60-66	315 - 351
F	0-59	0 - 314

Cheating on exams and plagiarism on writing assignments will not be tolerated, and a grade of F will be earned for the assignment. Cell phones must be put away during exams.

CCU Student Honor Pledge:

"Coastal Carolina University is an academic community that expects the highest standards of honesty, integrity and personal responsibility. As members of this community, we are accountable for our actions and are committed to creating an atmosphere of mutual respect and trust. On my honor, I pledge:

- That I will take responsibility for my personal behavior; and
- That I will actively oppose every instance of academic dishonesty as defined in the Code of Student Conduct.

From this day forward, my signature on any University document, including tests, papers and other work submitted for a grade is a confirmation of this honor pledge."

Attendance: Attending lecture is not mandatory, but it is the key to doing well in this class. Attendance is mandatory for exams—make-up exams are only given for university-excused absences (see <http://www.coastal.edu/policies/pdf/acad-125classattendance.pdf> for details). If you miss an exam you must contact me as soon as possible (within 24 hours) about the *possibility* of making up an exam. If you know you are going to be absent for an exam, you must contact me *as soon as possible before the exam* in order to schedule a make-up.

Learning disabilities: Students with documented learning disabilities should see me at the beginning of the semester so special arrangements can be made, if necessary, for your success in this course.

Other disabilities: Coastal Carolina University is committed to equitable access and inclusion of individuals with disabilities in accordance with the Americans with Disabilities Act and Section 504 of the Rehabilitation Act. Individuals seeking reasonable accommodations should contact Accessibility & Disability Services (843-349-2503 or <https://www.coastal.edu/disabilityservices/>).

Reminder: Turn OFF your cell phones before class!

Caveat: This syllabus is subject to change at the instructor's discretion.

Tips for success:

- 1) Come to class. Come to class. Come to class.
- 2) Take good notes.
- 3) Ask questions. Question everything. Ask questions.
- 4) Read your text carefully, especially the material I cover in class.
- 5) Study for more time than you think you need to study, and make sure it's quality time.
- 6) Study with others in class.
- 7) Rewrite your notes with what you've learned from asking questions and reading the text.
- 8) Get some sleep before exams.
- 9) Have a good attitude.
- 10) Come to class.

Schedule: This schedule is tentative and subject to change.

Week	Dates	Topic	Chapter Readings
Evolution and natural selection			
1	Aug 21 & 23	Darwin	22
2	Aug 26 – 30 Homework 1 due Aug 30	Evolution of populations	23
3	Sep 4 & 6 <i>Sep 2: Labor Day</i>	Speciation	24
4	Sep 9 – 13	Phylogeny	26
Plant form and function			
5	Sep 16 – 20 Exam 1: Sep 16	Plant structure	35
6	Sep 23 – 27	Plant transport	36
7	Sep 30 & Oct 2 <i>Oct 4: Student holiday</i>	Plant nutrition	37
8	Oct 7 – 11 Homework 2 due Oct 7	Plant reproduction	38
Animal form and function			
9	Oct 14 – 18 Exam 2: Oct 14	Animal form and function	40
10	Oct 21 – 25	Animal nutrition	41
11	Oct 28 – Nov 1 <i>Oct 28: Last day to W</i>	Animal circulation and gas exchange	42
12	Nov 4 – 8	Osmoregulation and excretion	44
Ecology			
13	Nov 11 – 15 Exam 3-Nov 11	Population ecology	53
14	Nov 18 – 22 Homework 3 due Nov 22	Community ecology	54
	<i>Nov 25 – 29</i>	<i>Thanksgiving Break</i>	
15	Dec 2 – 6	Ecosystem ecology	55
	Dec 11, Wed, 1:30 PM	Cumulative Final Exam	