

BIOL 140 (01)**BIOLOGY II****2013**

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<u>DATE</u>	<u>TOPICS and EXAMS & QUIZZES</u> ¹	<u>ASSIGNED READING Chapters & Sections (section page #s)</u> ²
W Jan 9	Introduction; Evolution	Ch. 22 (read before class), Ch. 23
F Jan 11	Evolution -continued	Ch. 23
M Jan 14	Evolution – continued	Ch. 24; Ch 25.4-25.6 (519-31)
W Jan 16	Evolution; Taxonomy & Phylogeny	Ch. 26.0-26.2; 26.6 (536-42; 551-3)
<u>F Jan 18</u>	QUIZ 1 ; Diversity of Life; Prokaryotes	pp. 98-9, Ch. 27
M Jan 21	MLK Day – no class	
W Jan 23	Diversity of Life - Eukaryotes – Protists	Ch. 25.3(514-9); 28.0-28.1; 28.7(575-9; 596-7)
F Jan 25	Diversity of Life – Plants and Fungi	Ch. 29.0-29.1 (600-6); Ch. 31; pp. 795-7
M Jan 28	Diversity of Life – Animals	Ch.32; (skim Fig 33.3); Ch 34.1 (697-702)
W Jan 30	Plant A&P	Ch. 35.0-35.4 (738-55)
F Feb 1	Plant Transport	Ch. 36
M Feb 4	The Rise of Land Plants	Ch. 29, Ch. 30 (skip 30.2 pp. 621-5)
<u>W Feb 6</u>	EXAM I	
F Feb 8	Angiosperms	Ch. 38
M Feb 11	Angiosperms - continued	
W Feb 13	Plant hormones	Ch. 39.0-39.2 (821-35)
F Feb 15	Plant hormones - continued	
<u>M Feb 18</u>	QUIZ 2 ; Animal Homeostasis & Tissues	Ch. 40.0-40.2 (852-62); Ch 50.1 (1085-91)
W Feb 20	Muscle	Ch. 50.5 (1103—10)
F Feb 22	Muscle; Nutrition & Digestion	Ch. 41; 33.1 (670-1)
M Feb 25	Digestive Systems continued	
<u>W Feb 27</u>	EXAM II	
F Mar 1	Digestive Systems continued	
M Mar 4	Circulation	Ch. 42.0-42.4 (897-915)
W Mar 6	Circulation - continued	
F Mar 8	Circulation; Immune system	Ch 43
Mar 11, 13, 15	Spring Break	
M Mar 18	Immune system continued	
<u>W Mar 20</u>	QUIZ 3 ; Gas Exchange	Ch. 42.5-42.7 (915-26)
F Mar 22	Gas Exchange continued	

¹ Cell phones are to be turned off and stored out of sight during all exams and quizzes and you may not leave the classroom until you have finished. If you leave the room, I will collect your exam/quiz at that time.

² Text: Reece et al. 2011. Campbell Biology. 9th ed. San Francisco, CA: Pearson Benjamin Cummings. 1263 p.

M	Mar 25	Osmoregulation & Excretory Systems	Ch. 44
W	Mar 27	Osmoreg. & Excretory Systems – cont.	
F	Mar 29	Easter Recess	
M	Apr 1	Neurons	Ch. 48; Fig 49.3 (1064)
W	Apr 3	EXAM III	
F	Apr 5	Neurons and Nervous Systems - continued	
M	Apr 8	Hormones	Ch. 45
W	Apr 10	Reproductive Diversity	Ch. 46.0 – 46.2 (996-1002)
F	Apr 12	Mammalian Reproduction	Ch. 46.3-46.4 (1002-11), pp. 1015-17
M	Apr 14	Mammalian Reproduction - continued	
W	Apr 16	QUIZ 4; Behavior	Ch. 51
F	Apr 18	Behavior continued	
M	Apr 22	Ecology	Chs. 52, 53
W	Apr 24	Ecology continued	
F	Apr 26	URCAS – no class	

May 1 (Wednesday) 8:30 AM EXAM IV and CUMULATIVE EXAM

GRADING: Your grade will be determined as a percentage of the points earned from the following:

- 1) Two best of three 85-pt exams (Exams I, II, and III)
- 2) 100 pt Exam IV taken during the final exam period
- 3) The cumulative part of the final (40 pts)
- 4) 4 quizzes (15 pts each)
- 5) Attendance at and summary/critique of 2 seminars (20 pts)
- 6) Attendance and participation (clickers) scaled to 15 pts (may replace lowest quiz grade)

GRADING SCALE:

	$87\% \leq B+ < 90\%$	$77\% \leq C+ < 80\%$	$67\% \leq D+ < 70\%$	F < 60%
$93\% \leq A$	$83\% \leq B < 87\%$	$73\% \leq C < 77\%$	$63\% \leq D < 67\%$	
$90\% \leq A- < 93\%$	$80\% \leq B- < 83\%$	$70\% \leq C- < 73\%$	$60\% \leq D- < 63\%$	

Because I drop the lowest test grade, I do not round up grades. A score of 89.9 is a B+.

EXAMS AND QUIZZES will be based on material presented in class plus figures, tables, and terms in the text that are mentioned during lecture. You are expected to attend all lectures. No make-up exams will be given except at my discretion in rare instances of medical problems or emergencies. If a problem arises, notify me **immediately, before** the exam, if possible.

SEMINARS: There will be several seminars offered by the department this semester. To earn the points stated above you must attend two of them, and submit a typed, 1-2-page summary and critique of the seminar **due by the start of the next class**. Unless announced otherwise, Biology Department seminars are scheduled on Mondays in FJ–B at 4:15 PM. This spring's seminars will be announced later.

ATTENDANCE/PARTICIPATION: This course requires the use of clickers to record attendance and participation during class. Participation may also include other assignments, possibly given by e-mail. These should be done alone, and must be turned in by the start of class unless otherwise stated. Late papers will not be accepted.

CLICKERS: If you do not have a clicker, one can be rented at the Biology Office (FJ 102W) for \$5 per semester. This requires a \$30 deposit from which the \$5 rental fee will be deducted. **Clickers must be returned by 5:00 PM on the first reading day after classes** for a deposit refund of \$25. If returned late, you may receive only a partial refund or none at all. All students who rented clickers for Bio 130 last semester will have been charged the \$5 fall rental fee. If you kept your clicker, you will be charged another \$5 rental fee for spring when you return it to the Biology Office at the end of this semester (i.e., of the \$30 initial deposit, you will get a \$20 full refund for using the clicker both semesters).

ELECTRONIC COURSE MATERIALS: PowerPoint presentations and lecture outlines will be available on Moodle and in a Bio 140 folder in the CJaslow public folder online.³ You are urged to make use of these materials, and you **should bring a printout of the lecture outline to class the day of that lecture**. As we finish each daily lecture or each set of notes, you should study them thoroughly and do any **practice quizzes available on Moodle**. Because these are all multiple choice types of questions, they do not force you to explain concepts as you will need to do on exams. However, they will help you to see what specific knowledge you have mastered and what areas need further study.

HONOR CODE: Your name on your exam, quiz, or assignment is your pledge that you have done the work without assistance, and that you have not given assistance to others. It is also your pledge that you have not copied the exam or any part of it, and that you have not discussed the contents of the exam or quiz with others who have not yet taken it. It is a violation of the honor code if your cell phone or any other electronic devices are not turned off and put away out of sight during a quiz or exam. It is also a violation if any written material I consider relevant to the quiz or exam is not stored out of sight during the quiz or exam.

COURSE OBJECTIVES: My goal in this course is to provide you with the best possible introduction to the biology of living organisms. Throughout the semester, you will be learning current knowledge and fundamental principles regarding the following general topics:

- 1) The process of evolution and the diversity of life.
- 2) Plant biology (comparative anatomy and physiology)
- 3) Animal biology (comparative anatomy and physiology)
- 4) Animal behavior
- 5) Ecology

After successfully completing this course you will have gained a very thorough background in organismal-level biology. For those going on in Biology, this background (along with Bio. 130) will prepare you for taking any of our upper-level courses. But whether or not you take any more biology courses, the critical thinking skills and knowledge you will have gained here are important for you to understand your position as a single, but highly influential, animal in the network of organisms inhabiting earth.

ASSUMPTIONS AND EXPECTATIONS: Although this is an introductory class, it is a very demanding one, and the second in the series that makes up our Biology core. Bio 130 was the first, and it is a prerequisite for taking this class. If you have not had Bio 130 and its lab (Bio 131), you should not be in this class, and you should speak to me as soon as possible about dropping.

Whether you struggled last semester in Bio 130, or made terrific grades, you now have a pretty good idea of what is asked of you in a college biology course. Hopefully, one thing that you learned is that you must take an active role in the class to do well. One thing this means is that you should take **notes** on everything mentioned

³ Because there is always a possibility that you will have technical difficulty accessing electronic materials, please be sure to obtain the necessary materials well in advance of the class or exam for which you will need them. For example, you will not be excused from an exam because you could not get the PowerPoints.

in class and you should study your notes **frequently**, not just a day or two before an exam. You will be exposed to many ideas and terms that you cannot hope to understand and learn if you study them all at once just before a test. As you study, make sure that you understand the concepts, then learn the details and terminology to explain them as fully as possible (remember that the practice quizzes on Moodle can help you see how well you know this material). Sometimes, people do poorly on exams even though they have studied very hard. This can happen because they have spent hours memorizing all the facts, but they really don't understand the fundamental concepts. As a result, they don't know which details are the important ones to use when answering the question. It also means that students waste time on exams writing down every fact they know, instead of focusing on the details needed for that question. Finally, once you think you have mastered the concepts and details, practice explaining them using the appropriate terminology. It is best to practice explaining to other people, who can point out if you've missed something or if your explanation of something's significance is off the mark. Remember, if you don't know the details, then the big picture you construct will be faulty. If you don't master the terminology, your discussion of concepts will be superficial.

To do your best you should read (but don't memorize) the assigned pages before lecture and do all the assignments. Look up unfamiliar words. Take careful and extensive notes in class (record the lecture if you can't write and listen at the same time). Be sure to ask questions if you don't understand something. As soon as possible after class, you should go over your notes and fill in any details from the book, PowerPoint, and your memory of the lecture. Again, look up any unfamiliar words used in lecture. Make note of questions or gaps in your notes so that you can ask me next time in class or during office hours. Then learn your notes backwards and forwards, making sure that you can explain each concept completely, including all of the details and using correct terminology. If you read the handout "Suggestions for Studying" today, it will give you many hints that should help you to do well. Above all, keep in mind that I am here to help you. I hope that you will feel free to come to me whenever you have a question, whether it is about a specific bit of material from lecture or a broader question about biology in general.

The list below summarizes some of the main points of this section. Please also read the more detailed handout, "Suggestions for Studying Biology."

- Read assigned pages/chapters before class, but don't try to memorize the content.
- Always print out the lecture outlines and bring them to class. Print and bring PPTs if they are provided ahead of time.
- Be sure to come to class! Copying someone else's notes is NEVER as good as being there and taking your own notes. Also, you don't want to lose participation points.
- Take notes of everything that is said and discussed. Don't just have copies of PPTs.
- Redo your notes daily to fill in holes using your book, the PPTs and your memory. Write down questions to ask in the next class or during office hours.
- Meet with other class members to work on notes and answer questions about notes.
- Know all vocabulary, processes, and content within 24-48 hours of lecture.
- Study beyond filling in holes and reading so that you fully understand the material and can explain it to others in your own words (not just memorized)
- Pretend to be the teacher. Meet with other class members to formulate possible exam questions and practice answering them. Try writing out your answers.
- Do the practice quizzes on Moodle.
- Be involved with the material.
- Find connections between different sections in this course, other courses, and your life
- Recognize the processes that you are using to learn and try new techniques as needed.