

BISC 162: BIOLOGICAL SCIENCES II
Introductory Biology for Science Majors
Spring 2014

COURSE SECTIONS

Section 1: 9:00 - 9:50 am, MWF, Nutt Auditorium (Music 123),

Section 2: 10:00-10:50 am, MWF, Nutt Auditorium (Music 123)

PROFESSORS

Dr. Beckie Symula (BISC162@olemiss.edu), 1st half of semester. Office: Shoemaker 202; Office hours: M, Th 3-5pm.

Dr. Richard Buchholz (BISC162@olemiss.edu), 2nd half of semester. Office: Shoemaker 104; Office hours: T 9-10am, W 3-5pm.

REQUIRED COURSE MATERIALS

Textbook: *Life, the Science of Biology, 9th edition*. 2011. Sadava, Hillis, Heller & Berenbaum. W.H. Freeman & Co., Sinauer Associates, Inc. ISBN 978-1-4292-1962-4 (Hardcover) OR 978-1-4292-5302-4 (Looseleaf). You will also need to purchase access to BioPortal, the on-line resources associated with the book. We will use Bioportal for lecture, homework and laboratory, so you are required to purchase the on-line access code. See Blackboard for details on other textbook options.

Clicker: You will be required to use a clicker during BISC 162. The University has adopted *Turning Technologies Response Card NXT Clicker* (ISBN: 978-1-9349-3145-5) as the campus standard. Please register your clicker if you did not do so last semester.

COURSE RESOURCES

Blackboard/Bioportal: These are the first places you should look for any information regarding the course during the semester, including syllabus, on-line weekly quizzes, your grades, announcements, etc.

BISC 160/162 Resource Center: Staffed by Nicole Lewis, located between the course lab rooms and is the place to go for information about any aspect of the class. Hours: T 8:30am to 11am and 1-4pm, W 1-4pm, Th 8:30am to 11am.

Study Sessions: Held by Biology Graduate Student, Blake Ramsby, every Monday through Thursday evening from 5:30-7 pm in the Shoemaker 303.

SI Sessions (Study Skills Sessions): Led by trained undergraduate SI Leaders (Ethan Collier, and Anna Grace Stout): See the "SI Study Sessions" sidebar in Blackboard for semester schedule. **Students who regularly attend SI sessions are more likely to make a higher grade than those who do not.**

COURSE REQUIREMENTS

Corequisite Lab (BISC 163): This is a separately graded course that is designed to complement lecture.

Prerequisites for BISC 162: Grade of A, B or C in BISC160 and BISC161.

Biology Majors and Minors: The Department of Biology requires a final grade of C or better in all Biology Courses used to satisfy your degree requirements.

COURSE GOALS

Learning Objectives: BISC162 is a foundation class that prepares students for advanced courses in the biological sciences and related subjects. It is the second semester of a two-semester series *for science majors and those entering the fields of medicine or pharmacy*. After completing this course, students should be able to link together basic biological concepts between BISC160 and BISC162. After BISC162 you should be able to:

1. Explain how all organisms are linked through evolutionary history.
2. Describe and characterize the diversity of life based on evolutionary history.
3. Explain processes that link organisms to their environment.
4. Describe how physiological processes are used in plants and how animals use physiology to maintain homeostasis.
5. Link physiological processes to cellular processes learned in BISC160.
6. Compare and contrast physiological processes among groups of **organisms**.

COURSE POLICIES

Attendance: Your regular attendance is expected. You MUST scan your ID at one of the four ID scanners in the auditorium at each lecture (but not during exams). We will also use Clicker data to verify your attendance.

Cell Phone/Electronics Policy: Use of cell phones, including texting, is **prohibited** during class. **TURN PHONES OFF IN LECTURE.** You may use laptops etc. in class for note taking, but it is expected that you will NOT be surfing web, using facebook, etc. Please consider that your computer or cell phone use in the classroom is a distraction to you and your classmates. Note: graduate students and instructors will be sitting in on all lectures and will enforce this policy. This is a privilege that we will take away if it is abused.

Academic Misconduct: In this course, academic misconduct applies to exams, assignments and online quizzes. Examples of academic misconduct can include, plagiarism (See Mbook), copying someone else's work or allowing someone else to copy your work, memorizing exam questions and providing them to students in another section, using your cell phone during exams or having someone else answer online assignment questions for you. The Ole Miss definition of Academic Misconduct can be found on pp. 4-6 in the Mbook (<http://dos.orgsync.com/home>). We do not tolerate any means of Academic Misconduct and will follow the University policy on generating sanctions in any event of misconduct that we identify.

Contacting Us:

Blackboard- This is usually the fastest way for you to get an answer. If your question is about lecture material, you should first consult your textbook and/or attend one of the many SI and daily study sessions that are available to you—schedules are posted on Blackboard and outside the Resource Center.

Office Hours- Both professors for this course hold regular weekly office hours. (See Blackboard or Bioportal for updated times). You are welcome to visit us at our office during these times without scheduling a special appointment. If your class schedule prevents you from seeing us at these times because of your schedule, then you can make an appointment by e-mail. Phone only if it is an emergency.

E-mail- If you have consulted Blackboard and still need to contact us, email: BISC162@olemiss.edu. **Do not email Dr. Symula or Dr. Buchholz at their personal addresses (We don't have enough storage space to accommodate all of you!).** Any emails sent there are immediately deleted.

Please consider the following when e-mailing any professor:

- Make your e-mail clear that it concerns BISC 162 by indicating so in the subject line of the e-mail. If you put "BISC 162 question" in the subject line, we will be able to recognize and respond to you sooner.
- Include your name and section number in your e-mail.
- Please do not e-mail a question that is already answered on Blackboard.
- *Write clearly.* Think of the e-mail as more like a short letter than a text message. Proofread your message before you send it.
- Only label your e-mail "Urgent" or "Emergency" if it actually is one of those things. Oversleeping and missing a lecture is not an emergency and you do not need to tell us about it.
- Give us plenty of time to respond. We will try to answer within 48 hours, but we have other classes, research, etc. If you send e-mail on Friday night, do not expect a reply until the next week.

Course Withdrawal Deadline (March 4, 2014): This is the last day to withdraw from the course. University policy states: "After the course withdrawal deadline, a student may drop a course only in cases of extreme and unavoidable emergency as determined by the student's academic dean. Unacceptable reasons for late withdrawal include dissatisfaction over an expected grade or a change in a student's degree program or major. In no case may a class be dropped after the last regular class day semester, session, or term. Courses dropped after the course withdrawal deadline will still appear on the student's official transcript. The W mark will be recorded if the student is passing the course at the time of withdrawal; the F grade will be recorded if the student is failing."

COURSE GRADES

Grading: There are a total of 275 points available for the class that can be obtained from exams and homework.

	<u>Points</u>	<u>Example Calculation</u>	Scale:
Exam 1	50	35	A=90-100%
Exam 2	50	31	B=80-89%
Exam 3	50	27	C=70-79%
Homework	25	23	D=60-69%
Final	100	80	F< 60%
Total	275	196	<u>We will NOT use the +/- grading scale option.</u>

Calculating your letter grade: $(196/275=0.712 \quad 0.712 \times 100=71.2\%=C)$

Online weekly quiz points are not added directly to this total, but to the total percentage of these points that you earn over the entire class, i.e. your final course average.

Assignments: There will be 6 online assignments (5 points each) that you will complete through BioPortal (<http://courses.bfwpub.com/life9e>) and the lowest one will be dropped. Each assignment will be assigned on Monday at noon and will be due Thursday at 11:59pm. For each assignment, you will download a handout and you will complete the assignment on paper (or your computer). Then you will return to BioPortal and answer 5 multiple-choice questions. The lowest grade will be dropped. Any evidence that you have had someone else do your work for you will give you a 0 for that assignment.

On-line Quizzes: There will be 10 online quizzes and the lowest one will be dropped. This is your **only** opportunity for extra points! Log onto BioPortal between Friday noon and Sunday 11:59pm for each of the quiz weekends indicated on syllabus schedule. Read the instructions carefully! You may take the 10-minute, 5-point quiz as many times as you like, but the score of your last effort will be recorded. At the end of the semester, your earned quiz points will be averaged and up to **2 points** will be added to your final grade. If you earn 40/45 points for your quizzes, then you have earned 0.88/2 available quiz points. So 0.88 point is added to your final grade. For example, if you have 171 total points from your exams and all 25 homework points, you earned 196/275 points (71.2%). Then your final grade would be $71.2+0.88=72.8=73\%$.

Exams: There will be 3 regular semester exams and a final exam, for a semester total of 250 points. You can estimate your grade at any time by averaging all your exam scores.

Exams 1 and 3 will be held in the evening between 7-8:30pm as shown below. Please contact us through BISC162@olemiss.edu if you will have problems with this time.

Exam 1,	Wednesday, February 12 th	50 points	Fulton Chapel (evening)
Exam 2,	Friday, March 7 th	50 points	Nutt Auditorium (normal)
Exam 3,	Wednesday, April 9 th	50 points	TBA
Final exam,	Dates below	100 points (50 from last 1/4 of class, 50 comprehensive)	

Exam Rules: Bring your student ID, #2 pencil and one Scantron form # F-289 to every exam.

Scantron form # F-289 (half page, red print) is required for each exam. These are available for purchase at the bookstore. **No electronic devices are allowed during an exam. Any cell phone, calculator, PDA, etc., that is on during an exam will be evidence of cheating and the student will make a zero on the exam.**

Exams will be returned as soon as possible. After analyzing your test, if you suspect a question was graded improperly, you have one week (from date of test return) to contact the Resource Center about the problem.

Makeup exams will only be given to those students who miss a test because of an official University activity or because of illness. *In all cases, arrangements for a makeup test must be made prior to the absence.* It is your responsibility to contact us in person to schedule a makeup exam. (You can schedule an appointment through BISC162@olemiss.edu to do this or attend office hours.). Make-ups are given solely at the instructor's discretion – do not assume that you will be automatically allowed to take a make-up exam. Make-up exams must be taken at a date and time decided by the instructor, generally within 2-3 days of the original exam date. Due to the size of this class and university regulations, exam dates are not negotiable. For example, do not schedule a family vacation to begin on the 6th of March if you have an exam on the 7th.

LECTURE TOPIC SCHEDULE

DR. BECKIE SYMULA

<u>Date</u>	<u>Lecture Topic</u>	<u>Homework/Quiz</u>	<u>Textbook Chapters</u>
1/22	The History of Life on Earth	-	25
1/24	Reconstructing and Using Phylogenies	Bioportal Quiz 1	22
1/27	Viruses Bacteria and Archaea: The Prokaryotic Domains	Homework 1	26
1/29	The Origin and Diversification of Eukaryotes	-	27
1/31	The Origin and Diversification of Eukaryotes	Bioportal Quiz 2	27
2/3	The Evolution of Plants and Plant Diversity	Homework 2	28/29
2/5	Evolutionary transitions and ecological role of plants	-	28/29
2/7	Growth and Transport in Plants	-	35/37
2/10	Reproduction in Flowering Plants	Bioportal Quiz 3	38
2/12	Plant Responses to Environmental Challenges	-	39
2/12	Exam 1 (Evening)	<i>Bring Scantron Form F-289</i>	
2/14	Animal Origins and the Evolution of Body Plans	-	31
2/17	Animal diversity: Protostome and Deuterostome Animals	-	32/33
2/19	Ecosystems and Global Ecology	-	58
2/21	Community Ecology	Bioportal Quiz 4	56/57
2/24	Community Ecology	Homework 3	56/57
2/26	Fungi: Recyclers, Pathogens, Parasites and Plant Partners	-	30
2/28	Population Ecology	Bioportal Quiz 5	55
3/3	Conservation Biology	-	59
3/5	Animal Behavior	-	53
3/7	Exam 2 (In class!)	<i>Bring Scantron Form F-289</i>	
3/10-14	SPRING BREAK		
	DR. RICHARD BUCHHOLZ (Order of topics in this half of the course may change, but you will be told if this occurs.)		
3/17	Physiology, Homeostasis and Temperature Regulation	-	40
3/19	Animal Hormones	-	41
3/21	Animal Hormones	Bioportal Quiz 6	41
3/24	Neurons and Nervous Systems	-	45, 47
3/26	Neurons and Nervous Systems	-	45, 47
3/28	The Mammalian Nervous System	-	45, 47
3/31	Circulatory Systems	Homework 4	50
4/2	Circulatory Systems	-	50
4/4	Gas Exchange in Animals	Bioportal Quiz 7	49
4/7	Gas Exchange in Animals	Homework 5	49
4/9	Nutrition, Digestion and Absorption	-	51
4/9	Exam 3 (Evening)	<i>Bring Scantron Form F-289</i>	
4/11	Salt and Water Balance and Nitrogen Excretion	Bioportal Quiz 8	52
4/14	Salt and Water Balance and Nitrogen Excretion	-	52
4/16	Immunology: Animal Defense Systems	-	42
4/18	GOOD FRIDAY -- NO CLASSES	Bioportal Quiz 9	
4/21	Immunology: Animal Defense Systems	Homework 6	42
4/23	Musculoskeletal Systems	-	48
4/25	Musculoskeletal Systems	Bioportal Quiz 10	48
4/28	Animal Reproduction	-	43
4/30	Animal Reproduction	-	43
5/2	Animal Development	-	44

The topics in the list above may change. You will be told in class when changes are made to this schedule.

Specific sections covered in the textbook will be provided on Blackboard under "Textbook Reading" on Blackboard and on BioPortal.

FINAL EXAM: Section 1 (9:00 am) Wednesday, May 7, 2014 8-11 am Nutt Auditorium
 Section 2 (10:00 am) Friday, May 9, 2014 8-11 am Nutt Auditorium

Bring Scantron Form F-289 & Student ID.

University rules allow a student to change the time of a final exam if that student has three tests on one day. In that case, they are

eligible to change the noon or 7:30 pm exam. Since our exams are at 8:00 am, our final exams are not eligible for change.