

responsibility to download the lectures for your use in the classroom, so that those of you who are slow note-takers or abysmal artists will not be struggling to keep up, and all of you can attend more carefully to what I say. HOWEVER, the power point slides will not contain everything I say---you will have to add the details if you are to have an effective study aid (yes, you still have to take notes). THUS, tempting though it may be, you cannot sleep in and skip the lectures without jeopardizing your grade, either directly (by lowering your class participation grade) or indirectly (by leaving you behind in the dust).

Lecture attendance: I expect you to attend class, arrive on time, and be prepared (see above). Students may miss class three times with no penalty (this includes illness, athletic activities, field trips, etc.). If you miss more than three classes, I will deduct 10 participation points for each day missed. If you anticipate missing more than three classes, *contact me as soon as possible*.

Policy on electronic devices: Cell phones must be on silent mode during lecture, and I ask that you refrain from texting during class. You may bring a laptop or tablet to class to take notes, but if the temptation to play games, chat with friends, etc., appears to be irresistible, I will ask you to put the device away, as engaging in ancillary activities is distracting to you and those around you and rude to the instructor.

Reading assignments: You have a well-written, up-to-date textbook; unfortunately, we will not have time to discuss everything in it. The chapters that are relevant to each lecture are indicated on the lecture schedule. I expect you to scan the relevant pages BEFORE each lecture to get a feel for the material I will be covering. After class, read the sections covered in the lecture more carefully, and amplify your lecture notes in areas you don't understand. There is an excellent summary at the end of each chapter, and useful questions to test your understanding. Though these are not included in the reading assignments, I suggest that you take advantage of them. I recommend that you also use the on-line study materials provided for the textbook (these include quizzes and flashcards that are quite helpful for learning the vocabulary). The link to on-line materials can be found in the textbook.

Study questions: I will post study questions after each lecture to help focus your efforts to learn the material. Your answers will not be graded, but *most of the essay questions on exams are taken from these study questions*, thus it is in your best interest to *write complete answers* to these questions each week (do NOT wait until the night before the exam).

Lecture quizzes: At the beginning of class on most Fridays, there will be a short quiz (10 points) covering the preceding 3 lectures (generally, the lectures since the previous quiz). This is not done to make your life miserable, but to encourage you to keep up with the class by reviewing the lectures each week. Quiz days are marked in the lecture schedule. I will announce any changes---but when in doubt, assume we are having a quiz. Plan to arrive for class on time, as *missed quizzes cannot be made up*. You are allowed to miss 2 quizzes without penalty, but you must contact me to explain your absence. One quiz grade will be dropped when computing your final grade.

LABS: *You are expected to read the assigned lab exercises BEFORE coming to lab* (this includes both the assigned sections of the lab manual and the lab handouts, which will be distributed in class on Fridays). Please bring your lab manual and lab notebook to every lab.

Lab attendance: Don't even consider missing a lab except in cases of dire emergency. If you do miss a lab, realize that you must make it up. IT IS YOUR RESPONSIBILITY to contact me to arrange a time to make up a missed lab *before the next lab practical*. Be aware that it may not be possible to make up exercises involving live material, and I may not be available to guide you as I would during the scheduled lab period.

Lab notebook: Critical observation is absolutely essential to science. Therefore, I ask that you bring a loose-leaf binder to lab. This binder will hold all lab handouts, plus your notes and drawings. The goal of this exercise is to hone your powers of observation and provide you with a useful study tool. The lab handouts will tell you what information must be included. Your lab notebooks will be graded during each lab period.

EXAMS: Please see the lecture and lab calendars below for the exam schedule. Make-up exams will be given at the discretion of the instructor. In case of illness, IT IS YOUR RESPONSIBILITY to contact the instructor BEFORE the missed exam and make arrangements to take the exam at another time. LAB PRACTICALS CANNOT BE MADE UP. If your absence is not excused, you will receive a 0 for the missed exam. The final lecture exam is cumulative, but weighted toward the last quarter of the course (80 points drawn from the period since the third lecture exam; 80 points drawn from the rest of the semester). ***Absolutely no activated electronic devices will be allowed during exams (this includes cell phones and ipods).*** If you are seen using one of these devices for any reason during an exam, you will receive a “0.”

GRADING: Your scores for all assignments and exams will be posted on Blackboard, so you can see how you are doing at any time. Simply divide your score by the total number of possible points to get a percentage, and compare this number with the grading scale (which will be posted following the first lecture exam). *There will be no extra credit options* beyond the occasional extra question on exams and lab practicals, so please focus your energy on what we are doing in class and lab. If you find yourself falling behind, or you are struggling to learn the material, *please contact me right away.* I am here to help you!

3 lecture exams (80 points each)	240 points	
Final lecture exam (cumulative)	160 points	
lecture quizzes & homework (10 points each)	100 points	Lecture: 500 points
<i>Stentor</i> lab write-up	50 points	
2 lab practicals (75 points each)	150 points	
Final lab practical	100 points	
Lab notebook	130 points	Lab: 430 points
Attendance & participation*	50 points	
Final grade		980 points

*This grade includes attendance, preparation, participation in discussions, and completion of all assignments. Please note that the instructor may exercise qualitative judgment in determining your final grade.

Grading scale:

A 93-100	B- 77-80	D+ 61-64
A- 89-92	C+ 73-76	D 56-60
B+ 85-88	C 69-72	D- 51-55
B 81-84	C- 65-68	F 0-50

Policy on honesty: Students are expected to abide by the college policy on intellectual honesty (see Student Handbook).

Academic support: The Academic Support Center houses Disability Support and Greyhound Tutoring on the first floor of Monocacy Hall and can be reached at [610-861-1401](tel:610-861-1401). Greyhound Tutoring provides course-specific tutors to Moravian students, free of charge. If you would like to work with a Greyhound Tutor to boost your academic success, please request a tutor through <http://bit.ly/NeedTutorMC> (case-sensitive). Please email Dana Wilson (wilsond@moravian.edu), Tutor Coordinator, for more information about tutoring.

Disability support: Students who wish to request accommodations in this class for a disability should contact the Academic Support Center, located in the lower level of Monocacy Hall, or by calling [610-861-1401](tel:610-861-1401). Accommodations cannot be provided until authorization is received from the Academic Support Center.

TIPS FOR DOING WELL IN THIS COURSE:

Lecture exams:

1. Scan the assigned pages in the textbook before coming to class.
2. Download the lectures and scan the material for each lecture before coming to class.
3. ***Come to class***
4. Do not fall behind---after each lecture, review and annotate your lecture notes, using the text to clarify things you do not understand. If the text cannot help you, please ask me. My opinion of you will not plummet if you ask a question, so don't be shy.
5. *Write out complete* answers to the study questions posted after each lecture. *Think* about these questions as you answer them.
6. Review the lectures and your answers to the study questions for each Friday quiz.
7. You are responsible for knowing the material I present *in lecture*---you should be reading relevant sections of the textbook, but *do not try to memorize the textbook*.

Lab practicals:

1. Attend all labs.
2. Prepare for each lab by reading the lab exercise *before* you walk into the lab.
3. Do not try to race through the lab exercises---be sure you understand what you are supposed to see, and be sure you actually see it before you leave. If you are confused, ask questions---the T.A. and I are there to help you!
4. If you finish a lab early, spend your extra time wisely---review the material, look at your neighbor's dissection, check your lab notebook, quiz your lab partner, etc.
5. Learn the regional and directional terms listed on the last page of your lab manual.
6. Come to the "open lab" review sessions before the lab practicals, and prepare by making a list of the things you need to review. Listen to the other students---they may ask things you didn't think about.

Vocabulary:

1. The single greatest barrier to learning zoology is the vocabulary, which may seem like a foreign language. Do whatever you need to do to learn the terminology---flashcards, glossaries, diagrams, study groups, etc.

LECTURE SCHEDULE

Week		Lecture topic	Relevant reading
January 18	M	1. Introduction: The big questions	Chapter 1
	W	2. Chemistry of life	Chapter 2
quiz	F	3. The cell & mitosis	Chapter 3
January 25	M	4. Meiosis & Reproduction	Chapter 7
	W	5. Development	Chapter 8
quiz	F	6. Body architecture	Chapter 9
February 1	M	7. Origin & early evolution of living systems;	Chapter 2
	W	8. Protozoa	Chapter 11
quiz	F	9. Multicellularity & Porifera	Chapter 12
February 8	M	LECTURE EXAM 1 (80 points, lectures 1-9)	
	W	10. Porifera	Chapter 12
	F	11. Porifera & Cnidaria	Chapters 12 & 13
February 15	M	12. Cnidaria & Platyhelminthes	Chapters 13 & 14
	W	13. Platyhelminthes	Chapter 14
quiz	F	14. Mollusca	Chapter 16
February 22*	M	15. Mollusca & Nematoda	Chapters 16 & 17
	W	16. Systematics & Annelida	Chapter 17
	F	17. Annelida	Chapters 10 & 18
February 29	M	LECTURE EXAM 2 (80 points, lectures 10-17)	
	W	18. Introduction to arthropods	Chapter 19
	F	19. Arthropoda: chelicerates, myriapods	Chapter 19
March 7		<i>NO CLASSES—SPRING BREAK</i>	
March 14	M	20. Arthropoda: crustaceans	Chapter 20
	W	21. Arthropoda: Hexapoda (Insecta)	Chapter 21
quiz	F	22. Echinodermata	Chapter 22
March 21	M	23. Introduction to chordates	Chapter 23
	W	24. Vertebrate origins	Chapter 23
quiz	F	<i>NO FRIDAY LECTURE---EASTER RECESS</i>	
March 28*	M	25. Fishes	Chapter 24
	W	26. Transition to land	Chapters 25 & 26
	F	27. Amniotes	Chapters 26 & 27

April 4	M	LECTURE EXAM 3 (80 points, lectures 18-27)	
	W	28. Snakes & Archosaurs	Chapters 27 & 28
	F	29. Mammals & Evolution	Chapters 28 & 6
April 11	M	30. Evolution	Chapter 6
	W	31. Support, protection, & movement	Chapter 29
quiz	F	32. Movement & Homeostasis	Chapters 29 & 30
April 18	M	33. Homeostasis	Chapter 30
	W	34. Circulatory Systems	Chapter 31
quiz	F	35. Respiratory systems	Chapter 31
April 25*	M	36. Digestive Systems	Chapter 32
	W	37. Nervous Systems	Chapter 33
	F	38. Sense Organs	Chapter 33

* lab practicals will be held during the weeks marked with an asterisk

MONDAY, MAY 2nd, 11:30-1:30 p.m.-----FINAL LECTURE EXAM

Please note: Lecture and lab syllabi outline the topics I hope to cover in the order I hope to cover them, but I may make changes as we progress through the semester.

EXAM SCHEDULE

Monday, February 8	Lecture exam 1 (80 points)
T-Th, February 23, 25	Lab practical 1 (75 points)
Monday, February 29	Lecture exam 2 (80 points)
T-Th, March 29, 31	Lab practical 2 (75 points)
Monday, April 4	Lecture exam 3 (80 points)
Thursday, April 26, 28	Final lab practical (100 points)
Monday, May 2	Final lecture exam (160 points)

LABORATORY SCHEDULE

Week	Laboratory topic	Laboratory exercise
<i>Lab 1.</i> January 19, 21	Introduction, Safety Microscopy, the cell, mitosis	Handout Exercises 1, 2
<i>Lab 2.</i> January 26, 28	Meiosis, Development	Exercise 3
<i>Lab 3.</i> February 2, 4	Protozoa	Exercise 6
<i>Lab 4.</i> February 9, 11	Porifera & Cnidaria	Exercises 7, 8
<i>Lab 5.</i> February 16, 18	Platyhelminthes & Mollusca	Exercises 9, 11
<i>Lab 6.</i> February 23, 25	LAB PRACTICAL for labs 3-5 (75 points) Nematodes	Exercise 10
<i>Lab 7.</i> March 1, 3	Systematics	Exercise 5
March 8, 10	<i>NO LABS---SPRING BREAK</i>	
<i>Lab 8.</i> March 15, 17	Annelids, Myriapods, Chelicerates	Exercise 12, 13, 15A
<i>Lab 9.</i> March 22, 24	Crustaceans, Insects, Echinoderms	Exercises 14, 15B, 16
<i>Lab 10.</i> March 29, 31	LAB PRACTICAL for labs 6, 8-9 (75 points) Vertebrate skeletal diversity	Handout in lab, Exercise 22A
<i>Lab 11.</i> April 5, 7	Vertebrate tissues Begin skinning fetal pig	Exercise 4 Exercise 22B
<i>Lab 12.</i> April 12, 14	Fetal pig: finish skinning, identify muscles	Exercise 22B
<i>Lab 13.</i> April 19, 21	Fetal pig: digestive, circulatory, respiratory, urogenital systems	Exercises 22C-E, G
<i>Lab 14.</i> April 26, 28	FINAL LAB PRACTICAL for labs 10-13 (100 pts.) Lab clean-up (clean & dry dissection instruments, trays, etc.)	

Process for Enrolling Students in Blackboard Course Site

Your class has a Web-based component on our Blackboard site. To enroll in Blackboard and your course shell, please do the following:

Go to <http://blackboard.moravian.edu>

Type in your **username**, (example: stxxx01) and your **initial password**. Your initial password is the **same as your network account password**. Press LOGIN.

Click on the **Home** tab at the top of your screen.

To enroll in a course shell, you will need the course ID or name, and an enrollment code that your professor will provide if he/she is using one.

Course ID: BIOL112.SP16	Enrollment Code: zoology
<p>To enroll in a course shell:</p> <ul style="list-style-type: none">• Click on the ‘Courses’ tab at the top of the screen.• Under ‘Course Search’ type in the course ID• Select ‘Go’ <p>OR</p> <ul style="list-style-type: none">• Use the ‘Browse Course Catalog’ hyperlink on the ‘Course Catalog’ module• Fill in the information in the ‘Search Catalog’ dialog boxes• Select ‘Go’ <p>Locate the chevron to the right of the course name---BIOL112.FA15</p> <ul style="list-style-type: none">• Select ‘enroll’ from the pull-down menu (<i>Do not select the course hyperlink if one is available.</i>)• Type in the enrollment code (zoology) for this class.• Select the ‘Submit’ button at the bottom or top of the page <p>Repeat this process for any course your professor has told you there is a Blackboard shell.</p>	

After enrolling in your course site(s), a complete list of course sites in which you are enrolled will appear on the upper right of your screen each time you log in to the Blackboard site. Simply click on the link to enter that course site.