

ZOOLOGY 101/BIOLOGY 101 - FALL 2013

Section 1: MWF 11:00 am, 3650 Humanities; Section 2: MWF 1:20 pm, 3650 Humanities



The number of eggs a female tortoise lays can be affected by population density in the nesting area. If the population density is high (many nests), she may lay one clutch of 4 - 5 eggs every few years; while in lower density areas she can lay several clutches of 15 - 20 eggs each year. The incubation period of the eggs is determined by the temperature, and ranges from 110 days to 250 days.

You can see this alibaba tortoise (Geochelone gigantea) and many other animals at Henry Vilas Zoo, Madison (www.vilaszoo.org).

LECTURERS

Dr. Sharon Thoma

slthoma@wisc.edu, 262-0148, 233 Noland (until 9/30); 226 Birge (after (9/30)

Office Hours: M 3-4 pm; T 11-12 am (until 11/1; after 11/1, by appointment)

Angela Dassow

amdassow@wisc.edu, 265-6868, 6763 Medical Sciences Center (MSC)

Office Hours: W 3-5 (from 10/25-11/27)

Dr. John Orrock

jorrock@wisc.edu; 263-5134, 356 Birge

Office Hours: TBA (starting 11/18)

TEACHING ASSISTANTS

Katie Gallagher

Meghan Kraus

John Stuhler

Office Hours

Th 9:45-10:45, Th 1-2, 262 Noland

Th 11-1, 262 Noland

T 9:30-10:30, F 9:45-10:45; 361 Birge

TEXT/READING

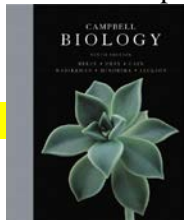
Required Text: Biology, Campbell (9th ed.), reserve copies in Steenbock Library

Supplemental materials will be placed on the course learn@uw site.



9th ed. 3-hole punch

OR



9th ed. hardcover

You can use either of the versions of the text shown on the left – the content is identical. You can also use the 8th edition of the textbook – the content is similar but not identical. Page numbers will be different than those listed on course schedule. Instructors will be referring to only the 9th edition of the text when writing pre-lecture quizzes.

TENTATIVE COURSE OUTLINE AND SCHEDULE

	<u>Date</u>	<u>Topic</u>	<u>Reading/Assignments</u>
st	W 9/4	Course Logistics, Introduction to Zoology	1-5; 12-17
MOLECULES OF LIFE & CELLULAR ORGANIZATION			
st	F 9/6	The Diversity of Life Molecules of Cells: Water, Carbohydrates	46-47; 68- 74, 51 (Hydrophilic and Hydrophobic Substances); Chapters 2 & 4 (optional chemistry review)
	M 9/9	Molecules of Cells: Proteins,	75- 86; 153-156

	<u>Date</u>	<u>Topic</u>	<u>Reading/Assignments</u>
st		Lipids	
st	W 9/11	Membranes	Pre-lecture Quiz (Due 9 AM) 125-136; 138-139
st	F 9/13	Prokaryotic Cells and the Human Microbiome	98-99; 556-558; 566-571 TED TALKS: How Bacteria Talk
st	M 9/16	Eukaryotic Organelles	Pre-lecture Quiz (Due 9 AM) 130; 98-122
HOW GENES CONTROL THE ACTIVITIES OF THE ANIMAL CELL			
st	W 9/18	Eukaryotic Organelles, DNA Structure	Pre-lecture Quiz (Due 9 AM) 130; 98-122; 86-88; 308-310
st	F 9/20	DNA Replication	Pre-lecture Quiz (Due 9 AM) 311-319
st	M 9/23	Telomeres, DNA Repair, Chromosome Packaging, Transcription	316-322, 325; 328-336 Assignment: Nature Notes #1 Posted on learn@uw
st	W 9/25	Transcription, Translation	Pre-lecture Quiz (Due 9 AM) 328-343
st	F 9/27	Mutation and Folding End of material for Exam 1	Pre-lecture Quiz (Due 9 AM) 344-346, TBA
REPRODUCTION OF CELLS & TRANSMISSION OF GENETIC INFORMATION THROUGH GENERATIONS			
st	M 9/30	Cell Cycle and Mitosis	228-237
st	W 10/2	Cancer	238-243; 373-377
	Th10/3	Exam 1, 7:15 pm	
st	F 10/4	Meiosis Chromosomal mutations (if time)	Chapter 13 297-300; 291-29
st	M 10/7	Mendelian Genetics	Pre-lecture Quiz (Due 9 AM) Chapter 14
st	W10/9	Mendelian Genetics	Chapter 14; 289-291 Assignment: Nature Notes #1 DUE
st	F10/11	Epigenetics	Pre-lecture Quiz (Due 9 AM) 320-323; 358, DNA is Not Destiny, Video TBA
ORGANIZATION OF THE ORGANISM: ENERGY AND EXCHANGE			
st	M10/14	Cellular Respiration - Providing Cells With Energy	Pre-lecture Quiz (Due 9 AM) Chapter 9
st	W10/16	Digestion	Pre-lecture Quiz (Due 8 AM) 852-862; 880-895
st	F 10/18	Digestion, Gas Exchange	
st	M10/21	Gas Exchange, Circulation	915-927; 898-903; 906-912
st	W10/23	Waste Disposal End of material for exam 2	Pre-lecture Quiz (Due 9 AM) 959-971
ORGANIZATION OF THE ORGANISM: COMMUNICATION			
ad	F 10/25	Nervous system and neuron organization, Electrical signaling	1045-1054; 1062-1067 Pre-lecture Quiz (Due 9 AM)
ad	M10/28	Synapses, Neurotransmitter function	1055-1060

	Date	Topic	Reading/Assignments
ad	W10/30	Brain regions, Science of Sleep	1067-1075
	W10/30	Exam 2, 7:15 pm	
ad	F 11/1	Hormones and pathways	974-982
ad	M 11/4	Pituitary function, Metabolism	Pre-lecture Quiz (Due 9 AM) 982-988
ad	W11/6	Stress	989-992
ad	F 11/8	The Immune System: lines of defense	929-935 Pre-lecture Quiz (Due 9 AM)
ad	M11/11	Acquired/Adaptive Immunity	935-945
ad	W11/13	Animal Behavior: Navigation, Communication systems	1118-1122 Pre-lecture Quiz (Due 9 AM)
ad	F 11/15	Learning, Mating systems End of material for exam 3	1123-1133
THE INTERACTION OF ORGANISMS WITH THEIR ENVIRONMENTS			
jo	M11/18	Natural Selection and Adaptation	Chapter 23 Assignment: Nature Notes #2 Posted on learn@uw
jo	W11/20	Natural Selection, Microevolution	Pre-lecture Quiz (Due 9 AM) Chapter 23, 24
jo	F 11/22	Microevolution and Speciation	Chapter 24
jo	M11/25	Speciation and Macroevolution Exam , 7:15 pm	Chapter 25
jo	W11/27	Ecology Background: historical perspective, overarching concepts	Chapter 52
	F 11/29	No class Thanksgiving	
jo	M 12/2	Population Ecology	Pre-lecture Quiz (Due 9 AM) Chapters 52, 53
jo	W 12/4	Population ecology	Chapter 53 Assignment: Nature Notes #2 DUE
jo	F 12/6	Species Interactions and community ecology	Pre-lecture Quiz (Due 9 AM) Chapter 54
jo	M12/9	Community ecology and ecosystems ecology	Chapters 54, 55
jo	W12/11	Ecosystems ecology; biodiversity and conservation	Pre-lecture Quiz (Due 9 AM) Chapters 55, 56
jo	F12/13	Biodiversity and conservation; global ecological and environmental issues	Chapter 56
	F 12/20	Final Exam 2:45-4:45 pm	

DISCUSSION

Zoology TAs will be on hand to assist you with lecture materials, answer your questions, and help you prepare for lecture exams. Attendance at discussions is optional, **but strongly recommended**. You do NOT have to be registered for a discussion section - you may attend any that fit into your schedule. Discussion sections start the week of September 9.

	Monday	Tuesday	Wednesday	Thursday	Friday
7:45-8:35					
8:50-9:40			TBA (Stuhler)		
9:55-10:45		Van Vleck B113 (Gallagher/Kraus)	Noland 119 (Stuhler)	346 Birge (Stuhler)	Noland 119 (Gallagher/Kraus)
11:00-11:50				Van Vleck B105 (Gallagher/Kraus)	<p>No discussions will be held on the following dates:</p> <p>Fri, 10/4</p> <p>Wed, 11/27 6 pm session</p> <p>Where two instructors are listed, instructor listed in blue will teach that section for the first 8 weeks of the semester, instructor listed in black will teach the second 8 weeks.</p>
12:05-12:55	Noland 119 (Stuhler)	Birge 346 (Gallagher/Kraus)	Psych 121 (Gallagher/Kraus)	TBA (Gallagher/Kraus)	
1:20-2:10		Noland 119 (Gallagher/Kraus)			
2:25-3:15	Noland 119 (Stuhler)	Noland 119 (Gallagher/Kraus)		Noland 119 (Gallagher/Kraus)	
3:30-4:20	Noland 119 (Stuhler)			Education L185 (Gallagher/Kraus)	
4:35-5:25					
6:00-7:00		Noland 119 (Gallagher/Kraus)	Noland 119 (Gallagher/Kraus)		

EXAMS and GRADING

There will be four exams in this course. The final exam is NOT cumulative. In addition to the four exams, there will also be graded pre-lecture quizzes and two short essay assignments.

Each exam = 100 points (20% x 4 = 80%)

Each essay assignment = 20 points (4%)

Pre-lecture quizzes = 80 points (16%)

No extra credit assignments will be offered to individuals in this course.

Grading scale (based on final percentage):

90-100%	A	78-79.99%	BC	Below 60.00% F
88.00-89.99%	AB	70-77.99%	C	
80.00-87.99%	B	60-69.99%	D	

EXAMS

First midterm exam – THURSDAY, October 3, 7:15 pm

Second midterm exam - WEDNESDAY, October 30, 7:15 pm

Third midterm exam – MONDAY, November 25, 7:15 pm

Final Exam – FRIDAY, Dec. 20, 2:45 pm

Rooms for exams will be announced during lecture.

The format of the exams is objective (multiple-choice, true/false, matching); exams will be computer-graded. You should plan to arrive at the exam a little early so you can be seated and start the exam on time. Students arriving late will not be allowed compensatory time to take the exam; all exams must be turned in to the proctor at the end

of the allotted exam time.

If you have an academic exam conflict (*a UW class taken for academic credit at the same time as this exam, another exam at the same time as this exam, or travel for varsity athletics*) you will be able to take a conflict exam at 5 pm on the day of the regularly-scheduled exam. If you have a conflict, you must fill out the alternate exam request form on the course learn@uw site and turn it in, at lecture, no later than Monday, September 16. Failure to turn in a request on time means you may not be able to take the alternate exam, even if you have an academic conflict.

THERE ARE NO LATE MAKEUP MIDTERM EXAMS except in extreme cases such as a death in the family or severe illness. Documentation of extreme cases will be required. If approved by the instructor, a makeup midterm will be a modified format (some combination of essay, short answer, oral exam at the instructor's discretion) and must be completed within one week of the regularly-scheduled exam. If you have an extreme situation, please contact the instructor in advance, if possible. If not possible, you must contact the instructor within 48 hours of the regularly-scheduled exam. Failure to contact the instructor in this time period may result in no credit for the exam. Lack of preparation, not feeling well earlier in the week, travel plans for holidays or any vacations, work, job interviews, sorority/fraternity/residence hall functions, volunteer activities, intramural sports, academic club activities (including travel or competition), season athletic tickets, televised football games, plays, your band having a gig, concerts, Frisbee tournaments, birthday parties for your aunt, etc. are NOT extreme cases.

The final exam is scheduled for Friday, December 20 at 2:45 pm. Students with another final at that time will be permitted to take the final on Saturday, December 21 at 9 am. There are NO alternate exams for ANY personal reasons. If you have three exams in 24 hours, you will need to change one of your other final exams. The final exam is NOT cumulative.

Exam results will be available to you on the course web site within one week after each exam. Any issues regarding grading or scores on a midterm must be presented to the lecturer no later than Friday of the week scores are posted.

No exam grades will be dropped. Low grades will not be dropped. There will be no makeup exams at the end of the semester to replace midterms that have been missed or to replace midterms on which low scores have been earned.

PRE-LECTURE QUIZZES

There will be 19 pre-lecture quizzes throughout the semester; these are listed on the course schedule above. These quizzes are intended to help you keep up with assigned readings, and to allow the teaching staff to assess which concepts require extra attention during lectures.

- Quizzes must be taken on learn@uw.
- Quizzes are open-book.
- Quizzes are NOT to be done in collaboration with fellow students.
- Quizzes will be posted on learn@uw at least 24 hours before the due date/time.
- Completed quizzes must be submitted no later than 9 AM the day of each lecture.
- There is only one attempt allowed for each quiz.
- Once a quiz is started, you will have 60 minutes to complete the quiz and submit the quiz. If it takes longer than 60 minutes to complete the quiz, the quiz will not be counted towards your grade.
- Once a quiz is started, you have to finish within the hour. If you close the quiz, you cannot re-start.
- No late quizzes will be accepted for *any reason*.
- The lowest **three** quiz scores will be dropped.
- If you miss a quiz or fail to complete a quiz within the time limit for *any reason* (including computer and/or connection problems), that will be counted as one of the dropped quiz scores.

NATURE NOTES ESSAYS

You will write two short essays, each between 1-2 pages in length (Times New Roman 12 point font, double spaced) that will be submitted on learn@uw in a specified drop box. The seminar notes essay will be based on your attendance at a campus seminar and *each* nature notes essay will be based on at least 20 minutes of field observations that you make individually. Details will be provided in the assignment sheets for each essay, which will be posted on the course web site.

MISCELLANEOUS COURSE INFORMATION

Course Web Site

There is a Learn@UW site associated with this course. All students registered for this class have been enrolled as users on the site for this class. You can access this site from your MyUW page or by going to uwmad.courses.wisconsin.edu. If you have problems accessing the site or any documents/videos on the site, please contact DoIT at 264-HELP.

PDF files corresponding to lecture will be posted on the web site no later than 5 pm the day before each lecture. Instructors pace the lectures on the assumption that you have printed out or reviewed lecture notes. Make sure you check the site regularly for lecture notes, as well as important announcements and materials. We will not provide powerpoint slides.

Communication

In addition to meeting your professors during their office hours or with TAs during discussion section, you may communicate with any of us by email. **Always** indicate that your message relates to the course by typing “**Zoology 101 Question**” in the subject line; if you do not do this, a response cannot be assured because your message might get lost in our inboxes.

In addition to the web site, your instructors may communicate with you by email. A course list-serve is set up for instructors to contact the hundreds of students enrolled in this course. **Students are not to post messages using the course list-serve.** Any student who sends messages to the entire course risks losing access to the learn@uw site for the remainder of the semester.

Laptop Policy

We do not recommend the use of laptops in this course for taking notes. If you do choose to use a laptop in class, any activities not related to class (e-mail, facebook, web-surfing, games, etc.) are not allowed. Students with laptops will be expected to sit in the back half of the lecture hall.

Computer typing/use is distracting to some students. Any student should feel welcome to make discomfort caused by computer use by others known to the TA or instructor. Students using computers may be directed to change seating so as not to be disturbing to others. Refusal to comply with such directions or continued use of a computer for non-lecture-related activity may result in ejection from class.

Honors Credit

Students taking this course for honors will be required to attend an informational meeting during the first two weeks of class. Honors requirements and meeting times are emailed to students who enrolled in honors prior to the first day of class. If you are enrolled in honors and did not receive the informational email, please contact Dr. Thoma. If you are enrolled in honors and fail to make one of the meetings or fail to contact Dr. Thoma within the first week of class, you will not be eligible to take the course for honors credit.

Study Skills and Tutoring

The Greater University Tutoring Service (GUTS; www.guts.studentorg.wisc.edu) is a volunteer organization that may be able to provide tutoring to students who desire the service.

Students With Disabilities

We wish to fully include persons with disabilities in this course. Please let Dr. Thoma know if you have a McBurney Visa listing any accommodations in the curriculum, instruction, or assessments in this course, and she will do her best to meet those accommodations. We will attempt to maintain confidentiality of any information you share with us. Any students who require special accommodations for exams are required turn in an exam accommodation request form (see learn@uw) to Dr. Thoma no later than September 16.

Academic Honesty (from the Offices of the Dean of Students; <http://www.wisc.edu/students/saja/index.html>)

Academic honesty requires that the course work (drafts, reports, examinations, papers) a student presents to an instructor honestly and accurately indicates the student's own academic efforts.

UWS 14 is the chapter of the University of Wisconsin System Administrative code that regulates academic misconduct. UW-Madison implements the rules defined in UWS 14 through our own "Student Academic Misconduct Campus Procedures." UWS 14.03 defines academic misconduct as follows:

Academic misconduct is an act in which a student:
seeks to claim credit for the work or efforts of another without authorization or citation;
uses unauthorized materials or fabricated data in any academic exercise;
forges or falsifies academic documents or records;
intentionally impedes or damages the academic work of others;
engages in conduct aimed at making false representation of a student's academic performance;
assists other students in any of these acts.

We take academic honesty very seriously in Zoology 101. If you engage in academic misconduct in this course, you will be penalized with a failing grade for the course. Examples of academic misconduct in Zoology 101 include, but are not limited to, having notes out and visible during an exam, using notes during an exam, copying answers from another student during the exam, stealing an exam, using a stolen exam, misrepresenting an academic conflict (e.g. saying you have an academic conflict for an exam when you don't), not attending an exam and claiming that you did, taking a quiz for another student, collaborating on a quiz with another student, copying essay material from other sources, making false claims of turning in assignments.

ZOOLOGY 102

Zoology 102 lab is a separate course from Zoology 101. You do not need to be enrolled in Zoology 102 to take Zoology 101. Any questions regarding Zoology 102 should be addressed to the Zoology 102 Coordinator (Gale Oakes; goakes@wisc.edu).