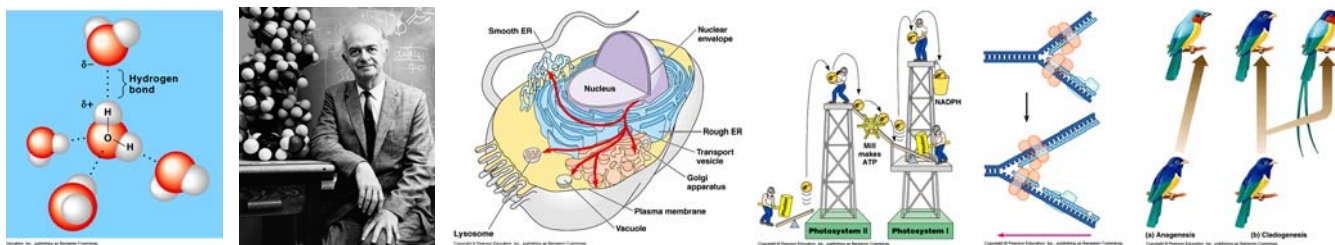


Biology 211 - Principles of Biology, Fall 2005



Images from text (left to right): H bonding, DNA, animal cell, energy transfer/photosynthesis, replication, Darwin's Finches

Lecture: 9-9:50 a.m., MWF - you are strongly advised to bring your text to lecture

Labs: 8-10:50 a.m. & 12:30-3:20 p.m. TR, 5:30-8:20 p.m. W (each student needs 1 section)

Texts: Biology, Campbell/Reece, 7th ed. and Investigating Biology, Morgan/Carter, 4th ed.*

* these will be used for Biology 211, 212, and 213 so you won't be buying more biology books next term.

Additional Materials: calculator for lab

Instructors: office hours posted on office doors by week one.

Dr. Sarah Boomer (SB), Office NS219, Phone 8-8209, email: boomers@wou.edu

Dr. Irja Galvan (IG), Office NS223, Phone 8-8491, email: galvani@wou.edu

Week	Lectures	Text Ch.	Lecturer	Lab Topic
1	M - Introduction/Chemistry	1 & 2	IG	Scientific Method
	W - Chemistry/Macromolecules	2, 3, & 5	IG	
	F - Carbohydrates/Lipids	5	IG	
2	M - Proteins/Nucleic Acids	5	IG	Enzymes
	W - Tour of Cell I	6	IG	
	F - Tour of Cell II	6	IG	
3	M - Membranes in Detail	7	IG	Microscopes/Cells
	W - Introduction to Metabolism	8	IG	
	F - Exam 1 (Introduction to Membranes)		100 IG	
4	M - Respiration I	9	IG	Diffusion/Osmosis
	W - Respiration II	9	IG	
	F - Photosynthesis I	10	IG	
5	M - Photosynthesis II	10	IG	Photosynthesis
	W - Cell Cycle/Mitosis	12	IG	
	F - Meiosis	13	IG	
6	M - Exam 2 (Membranes to Meiosis)		100 IG	Cell Division
	W - Mendelian Genetics	12	SB	
	F - Beyond Mendel	13	SB	
7	M - Linkage and DNA History	15	SB	Genetics
	W - DNA Structure and Replication	16	SB	
	F - HOLIDAY (Veteran's Day)			
8	M - Transcription	17	SB	Molecular Biology
	W - Translation	17	SB	
	F - Exam 3 (Genetics to Translation)		100 SB	
9	M - Darwin	22	SB	No Labs
	W - Population Genetics I	23	SB	
	F - HOLIDAY (Thanksgiving)			
10	M - Population Genetics II	23	SB	Evolution
	W - Origin of Species I	24	SB	
	F - Origin of Species II	24	SB	

Final - 50 SB/Evolution (including final lab); 150 comprehensive non-evolution IG/SB

Lecture Attendance and Policy:

If you miss a class lecture, you are responsible for obtaining complete notes and class handouts. Most lecture outlines will be on-line. Please make every effort to turn off cell phones during lectures; they are a serious annoyance and distraction. As will be emphasized in lab, 3 unexcused lab absences or more constitutes an automatic F in this course.

Exam Policy:

You will be required to place all belongings to the side of the lecture hall before taking a seat. Every effort will be made to place empty desks between students, particularly in the back of the lecture hall. Calculators will not be allowed unless stated. Owners of cell phones that go off may incur a point deduction. If you miss an exam because of a university-sanctioned event, notify the appropriate instructor one week in advance to schedule your make-up. If you miss an exam because of a medical or family emergency, you must communicate this through the Office of Student Affairs (838-8221) and have this situation broadcast to all your professors. Make-up exam questions and formats will be different (e.g. all essay). No alternative final exams or exam times will be available.

Cheating Policy:

Please review the student academic handbook about cheating. Any student who cheats on a quiz/exam (e.g. using notes, electronic devices, or facilitating information to classmates) or on an assignment (e.g. copying/plagiarism of any kind) will receive a zero for that assignment.

Point Distribution:

3 In-Class Exams = 300
Final Exam = 200
Lab (see lab packet) = 250
Total 750

Grading

90-100% = A
80-89% = B
70-79% = C
60-69% = D
<60% = F

Biology 211 Lab Syllabus - Fall 2005

Required Lab Materials:

Investigating Biology, Morgan/Carter, 5th edition; Calculator; Pens/Pencils; Bring textbook as it will be helpful or required for most labs.

Attendance and Late Policy:

1. 3 or more unexcused absences will result an automatic grade of F for the entire course.
2. Excused absences include the following cases, handled accordingly: for university-sanctioned events, notify your instructor one week in advance with documentation from the faculty member sponsoring the event. Medical or family emergency communicated to all your professors through the Office of Student Affairs (838-8221).
3. Can I make up an unexcused absence? Only if you attend another lab section during the same week AND ask the instructor for permission in advance. You may do this up to 3 times.
4. Any scores for assignments missed because of excused absences will be averaged from your term lab average score from comparable assignments.

Week	Topic	Pre-Lab	In-Lab	Quiz
1	Scientific Method	None	20 pts.	None
2	Enzymes	8 pts.	12 pts.	Over week 1 (12 pts.)

3	Microscopes/Cells	None	20 pts.	Over week 2 (12 pts.)
4	Diffusion/Osmosis	8 pts.	12 pts.	Over week 3 (12 pts.)
5	Photosynthesis	8 pts.	12 pts.	Over week 4 (12 pts.)
6	Cell Division	None	24 pts.	Over week 5 (12 pts.)
7	Genetics	8 pts.	12 pts.	None - only on lecture
8	Central Dogma	None	6 pts.	Over week 7 (12 pts.)
9	Evolution*	8 pts.	12 pts.	Over week 8 (8 pts.)
TOTAL	250 pts. TOTAL	40 pts.	130 pts.	80 pts.

***Evolution concepts will be tested for on final.*

About Lab Assignments

Doing everything in the Investigating Biology manual would be impossible. In working with this manual over the years, we have selected only the most effective subset of required experiments - in some cases modifying them, in other cases re-writing our own labs. Each of these will be handed out in lab one week before the lab is run. Thus, it is important you read provided instructions before lab, complete the pre-lab (if assigned), AND bring instructions to lab every week - because it lays out only the sections we will be doing, with modifications we have developed.

What is the Pre-Lab?

An individual homework assignment (8 pts. X 5 weeks - see syllabus above) that you must complete before coming to lab. It shows us that you have read some of the lab in advance and will be more prepared to perform activities effectively. Pre-Labs are collected FIRST THING in lab and will not be accepted thereafter.

What is the Quiz?

An individual activity (8-12 pts. virtually every week, see syllabus above) that assesses your mastery of the PREVIOUS week's lab. Quizzes take place immediately after pre-labs are collected and last about 15 minutes. Students who arrive to lab late will not receive extra time to complete quizzes. All lab material is fair game so you should take adequate notes in your lab manual during each week's activity to understand what you did and why. Focusing only on the worksheet answers is NOT enough. Vocabulary, math, reactions, images, and manual review questions are all things you should review for each quiz.

How Should I Use the Lab Manual?

Most protocol come directly from the lab manual - so it is required at every lab. Given that quizzes will cover any part of lab activities (including review questions at the end), it is important each person take notes and answer questions as the experiment is running IN THEIR OWN MANUALS. Thus, each person should have his/her manual out during the lab, treating it like a personal lab notebook. Only after the whole activity is over should you fill out the provided in-lab worksheet (see below). Once you are home, you will have your manual notes and additional review questions as study materials.

What is the In-Lab Worksheet?

This assignment, based largely on manual questions and tables, will be collected first thing in lab the week after the actual lab was completed. Although due a week later, each team should finish worksheets during the lab, immediately after completing the exercise. Labs are designed to provide you with enough time to do so. Most worksheets are to be completed by your whole table, but several are pair or individual assignments (worksheets will say so). Given substantial grading involved, we are unable to accept individual worksheets for team assignments.