

**Principles of Biology: Organisms, Ecology, and Evolution**  
**BIOLOGY 203**  
*Fall 2008*

**Instructors:**

Lecture & Laboratory: Dr. Mathew Dornbush: Office: LS 464, Phone: 465-2264, [dornbusm@uwgb.edu](mailto:dornbusm@uwgb.edu)  
 Dr. Timothy Markowitz: Office: LS 405, Phone: 465-2284, [markowit@uwgb.edu](mailto:markowit@uwgb.edu)

**Texts:** Campbell and Reece, 7<sup>th</sup> edition, 2005

**Websites:** [www.campbellbiology.com](http://www.campbellbiology.com) (text)  
[http://www.uwgb.edu/nas/docs/Writing\\_in\\_Biology.pdf](http://www.uwgb.edu/nas/docs/Writing_in_Biology.pdf) (Recommendations for Student Writing in Biology)

**Lecture:** Monday, Wednesday, Friday 11:40-12:35; MAC 206;

**Lab:** LS 210 time by section

<i>Date</i>	<i>Topic</i>	<i>Readings</i>
Sept. 3, 5	Introduction and What is Science?	Chapter 1
Sept. 8, 10	Evolution	Chapters 22 and 24 Optional Chapters 23 and 25
Sept. 12	Prokaryotes	Chapters 27
Sept. 15, 17	Eukaryotes - Protista	Chapters 26, 28
Sept. 19, 22	Plant Diversity	Chapters 29 and 30
Sept. 24	Fungi	Chapters 31
Sept. 26, 29	Animal Diversity ( <i>End Exam 1 Material</i> )	Chapters 32, 33
Oct. 1, 3	Plant Anatomy and Primary Growth	Chapter 35
Oct. 6	<b>Exam I</b> – Science, Evolution, and Diversity	<b>STUDY HARD</b>
Oct. 8	Secondary Growth	Chapter 35
Oct. 10	Transport in Plants	Chapter 36
Oct. 13, 15, 17	Plant Nutrition	Chapter 37
Oct. 20, 22	Plant Reproduction ( <i>End Exam 2 Material</i> )	Chapter 38
Oct. 24	Introduction to Animal Form and Function	Chapter 40
Oct. 27	<b>Exam II</b> – Plant Form and Function	<b>STUDY HARDER</b>
Oct. 29	Animal Nutrition	Chapters 41
Oct. 31, Nov. 3	Circulation and Gas Exchange	Chapter 42
Nov. 5	Osmoregulation and Excretion	Chapter 44
Nov. 7	Immune System	Chapter 43
Nov. 10, 12	Nervous System	Chapter 48
Nov. 14	Sensory System ( <i>End Exam 3 Material</i> )	Chapter 49
Nov. 17	<b>Exam III</b> – Animal Form and Function	<b>YOU KNOW WHAT TO DO</b>
Nov. 19	Introduction to Ecology and the Biosphere	Chapter 50
Nov. 21, 24	Ecosystems	Chapter 54
Nov. 26	Community Ecology	Chapter 53
	<b>Nov. 28</b> <b>Thanksgiving Recess</b>	
Dec 1	Community Ecology Cont.	Chapter 53
Dec. 3, 5	Population Ecology	Chapter 52
Dec. 8, 10	Behavioral Biology (if time permits)	Chapter 51
Dec. 17 (10:30-12:30)	<b>Final Exam</b> – all Ecology lectures	<b>OLD HAT NOW</b>

**All requirements of the course must be satisfactorily completed to pass the course.**

Note: The **test dates are definite**. Should you be unable to attend a scheduled test **YOU MUST** telephone me (465-2264) prior to the start of the exam. If unable to reach me, phone the message to the Human Biology office (2681).

<b>Evaluation:</b>	3 1-hour Exams (100 pts. each)	300 points
	Laboratory Quizzes and Reports	125 points
	Lecture Final Exam	<u>100 points</u>
	Total	525 points

<b>Grade Distribution</b>	
A	90 - 100
AB	88.5 - 89.99
B	80 - 88.49
BC	78.5 - 79.99
C	70 - 78.49
D	60 - 69.99
F	< 60

### **Course Objectives**

1. Foster critical thinking.
2. Expand students' understanding of science and scientific reasoning.
3. Introduce basic concepts central to the science of Biology.
4. Offer students the opportunity to learn skills critical to scientific exploration.
5. Nurture students as Biologists. Along with such central concepts as evolution, natural history and ecology, a good Biologist understands the basic physiology of both plants **and** animals.

**Academic Integrity:** Cheating and plagiarism are grounds for automatic failure.

Consistent with the federal law and the policies of the University of Wisconsin, it is the policy of the University of Wisconsin-Green Bay to provide appropriate and necessary accommodations to students with documented physical and learning disabilities. If you anticipate requiring any auxiliary aides or services, you should contact us or the Coordinator of Services for Students with Disabilities at 456-2671 as soon as possible to discuss your needs and arrange for the provision of services.

**Principles of Biology II Laboratory Schedule  
Fall 2008**

<b>Week of</b>	<b>Lab Topic</b>	<b>Quiz or Report</b>	<b>Material</b>
<b>Sept 2 (Tues.)</b>	<b>No Laboratory</b>		
Sept 8	Plant Nutrition (start), Dichotomous Keys	Report I Assigned	Lab Manual, Field Clothes
Sept 15	Phylogeny of Life		Lab Manual
Sept 22	Invertebrate Diversity (start)	<b>Report I Due, Report II Assigned</b>	Lab Manual
Sept 29	Invertebrate Diversity (finish)		Lab Manual
Oct 6	Stems, Roots (start)	<b>Report II Due,</b>	Lab Manual
Oct 13	Roots (finish); Leaves	Report III Assigned	Lab Manual
Oct 20	Plant Reproduction		Lab Manual
Oct 27	Analysis of Urine and the Effects of Fluid and pH Loads on Kidney Function	<b>Report III Due, Report IV Assigned</b>	Lab Manual, Safety Goggles
Nov 3	Begin Pig Dissection		Lab Manual, Pig Dissection, Goggles, Dissection kit
Nov 10	Continue Pig Dissection	<b>Report IV Due</b>	Lab Manual, Pig Dissection, Goggles, Dissection kit
Nov 17	Continue Pig Dissection		Lab Manual, Pig Dissection, Goggles, Dissection kit
Nov 24	Reflexes, Receptors and Nervous System	<b>Pig Quiz</b>	Lab Manual, Pig Dissection, Goggles, Dissection kit
Dec 1	Disease Transmission		Lab Manual, Goggles
Dec 8	Lab Final	<b>Lab Final</b>	

**Lab Manuals:** Bio II Lab Manual available in the Phoenix bookstore  
 Recommendations for Student Writing in Biology  
 (found at [http://www.uwgb.edu/nas/docs/Writing\\_in\\_Biology.pdf](http://www.uwgb.edu/nas/docs/Writing_in_Biology.pdf))  
 Dissection Guide/Atlas of the Fetal Pig by Smith & Schenk,

**Other Materials:** Safety Goggles, Dissection Kit

Lab exercises will give you the opportunity to apply and reinforce concepts that you are learning in lecture. Lab reports also will require sound reasoning and clear, effective writing, important skills that you should refine while you are in college. Although you are encouraged to work in groups during lab, we expect you to write your reports in your own words, independently of other students. Specific expectations for each report will be described during lab. **Late assignments will lose credit (5% for every day they are late), and cannot be handed in after the corrected assignment has been returned.**