Note: 2011 Syllabus will be published soon. This syllabus is for reference. JY

Biology 206 – Introduction to Organismal Biology, 5 cr

Western Washington University
Winter 2010 – Deborah Donovan and Jeff Young

Lecture:	AW204, MWF, 10pm - 11:20pm
Lab:	BI 355, Arranged
Office Hours:	Donovan– (BI 310): T 12-1, Th 11-1, and by appt. Young – (BI 412): MWF 1 – 2 and by appt.
Phone/email:	Donovan – 650-7337, donovan@biol.wwu.edu Young – 650-3638, young@biol.wwu.edu
	Course web pages: http://www.biol.wwu.edu/young/206 http://fire.biol.wwu.edu/donovan/ http://www.biol.wwu.edu/206 (Lab Page)
Graduate TAs:	Tristen Biando, Matt Fisher
Undergraduate TAs:	TBA

Please let us know ASAP If you require disability accommodations.

Required Texts:
1. Biological Science, Scott Freeman, 3rd
2. Biology 206 – Organismal Biology Laboratory Manual
3. Van De Graaff. A Photographic Atlas for the Biology Lab
4. Knisely, K. 2002. A Student Handbook for Writing in Biology

Course Objectives:

Biology 206 is an introduction to the anatomy and physiology of organisms. The course will focus mostly upon flowering plants and multicellular animals, but some reference will be made to lower plants and protists. The course addresses challenges faced by all organisms: acquiring nutrients, maintaining water balance, excretion, monitoring internal and external environments, movement, reproduction, and development. In this course, we will explore the diverse ways in which organisms have dealt with these common problems.

Undergraduate and graduate student teaching assistants will be in the lab to introduce exercises, guide your study, and grade assignments. They are resources important to your success in this course. Please respect the work that they do for you, and don't hesitate to ask them for assistance with lecture or lab material. Your lab TA will provide the schedule of laboratory exercises and evaluations.

Student Responsibilities and Evaluation:

Success in this class will require some memorization, concept application, problem solving, and integration of the subject matter with your personal experiences and/or current events. Understanding biology in this course, in your future career, and in your everyday lives requires the use of a specialized, well-practiced vocabulary and a context that is developed

through your active participation in lecture and laboratory meetings. This syllabus includes the tentative schedule of lecture material. In view of the limited number of lectures on each topic, you are expected to read the assigned chapters before the lecture meeting, and come prepared to ask questions about the reading and/or the previous lecture. ***Pre-reading*** involves a careful survey of chapter contents, with special attention paid to section headings, figures, boxed information including key concepts and objectives, bulleted items, new terms printed in bold face, etc. The purpose of pre-reading lecture material is to provide you with a conceptual context and an introduction to the vocabulary so that you may actively participate in lecture. Similarly, you are required to read the laboratory assignment prior to your arrival in the lab, and in doing so, be ready to learn. In many cases, the course of lecture and lab discussions will assume that you are familiar enough with the topic for us to emphasize material that may be more difficult to comprehend or that will go beyond what is covered in the textbook or lab manual. Investments of time and energy in this way will increase the chance that the course will not only meet your expectations, but that you will also be satisfied with your performance.

Grades will be assigned on the basis of your performance on frequent quizzes and two exams in each of the two portions of the course (animal biology and plant biology), and your laboratory work, as follows:

Lecture exams (4)	100 points each	400 points total	} 73%
Lecture quizzes	(variable)	40 points total	
Laboratory exams (2)	60 points each	120 points total	} 27%
Laboratory worksheets and reports:	(variable)	40 points total	
		600 points possible	

Lecture exams and quizzes will consist of a mixture of multiple choice, fill-in, matching, concept mapping, and short essay questions. Quizzes may be taken with a partner.

Enrollment Policy: You are currently enrolled in this course and only you can change this. If you fail to complete all of the assignments, or stop coming to class and do not fill out an official withdrawal, you will receive a failing grade. This policy is in place due to the fact that demand for this class often exceeds space availability and to facilitate responsible and timely decisions regarding enrollment.

Missed Exam and Late Work Policy: It is the student's responsibility to make it to all exams/quizzes. Makeup exams will be given ONLY if you are excused from the exam BEFORE the scheduled date, or, in the event of illness, you have a note from a health professional confirming that you were unable to take the exam during the scheduled time. (Contact me directly or leave a message in the Biology office.) It is also your responsibility to contact me as soon as you return. Failure to do so may jeopardize your chance of a make-up exam. Make-up exams are usually all essays. Late assignments are usually penalized 10% for each day late.

Grading Scale:

94 - 100 %	A	74 - 76	C
90 - 93	A-	70 - 73	C-
87 - 89	B+	67 - 69	D+
84 - 86	B	64 - 66	D
80 - 83	B-	60 - 63	D-
77 - 79	C+	below 60 %	F

Final assignment of a course grade may include an adjustment of up to 1/3 of a grade (using + or - grading). Our use of this option will be based on a consistent and obvious pattern of improvement of your test scores during the quarter and/or our subjective evaluation of your

attendance and participation in both lecture and lab. (Students who choose P/F as a grading option must achieve at least 74% to pass.)

Tentative Lecture Schedule:

Biology of Plants

Young Winter 2010

Day	Lecture Topics	Assigned Readings Chapter: pages
Week 1: 1/6 – 1/8 W 1/6 F 1/8	 Introduction Plant Structure and Growth I Plant Structure and Growth II	 JY and DD Ch **36:** 791 – 800, pp. 470 - 475 Ch **36:** 800 – 807
Week 2: 1/11 – 1/15 M 1/11 W 1/13 F 1/15	 Plant Structure and Growth III Transport in Plants I Transport in Plants II	 Ch **36**: 807 – 812 Ch **37:** 813 – 819, **Quiz** Ch **37:** 819 – 827
Week 3: 1/20–1/22 M 1/18 **Holiday** W 1/20 **F 1/22**	 Martin Lurther King Jr. Day Transport in Plants III **EXAM I**	 Ch **37:** 827 – 836, **Quiz** **Lectures 1 – 7**
Week 4: 1/25-1/29 M 1/25 W 1/27 F1/29	 Plant Nutrition I Plant Nutrition II Plant Reproduction I	 Ch **37**: 837 – 849 Ch **37:** 849 – 856 Ch **40:** 892 - 901; and pp. 475-478
Week 5: 2/1-2-5 M 2/1 W 2/3 F 2/5	 Plant Reproduction II Plant Response to Signals I Plant Response to Signals II	 Ch **40:** 901 - 912 Ch **39:** 857 – 870**, Quiz** Ch **39:** 870 - 883
Week 6: 2/8-2/12 **M 2/8**	**EXAM II**	**Lectures 8 - 13,** **Focus on recent materials, though comprehensive.**
	2/10/08 Biology of Animals	

Lecture notes and reading assignments are subject to change.

The assigned reading is considered the minimum required. Students should plan on using the Glossary and the Index in Freeman.

Students are further encouraged to consult other sources (other texts, library, tutors, professor and TA office hours, etc.) when assigned material is not clear.

Tentative Lecture Schedule:

Biology of Animals

Donovan-Winter 2010

Day	Lecture topic	Assigned Reading (Chapter: pages)
Week 6: 2/8-2/12		
W 2/10	Animal form and function; Homeostasis	40: 820-831
F 2/12	Homeostasis and thermoregulation	40: 831-841
Week 7: 2/15-2/19		
M 2/15	**Holiday**	
W 2/17	Nutrition	41: 844-855; 862-864
F 2/19	Circulation; **Quiz (Form & function; Nutrition)**	42: 867-879
Week 8: 2/22-2/26		
M 2/22	Circulation and gas exchange	42: 884-895
W 2/24	Gas exchange; **Quiz (Circulation)**	
F 2/26	Osmoregulation and waste disposal	44: 922-931
Week 9: 3/1-3/5		
M 3/1	**EXAM III: Material from Ch. 40-42 (through gas exchange)**	
W 3/3	Chemical signals	45: 943-950
F 3/5	Nervous signaling **Quiz (Excretion and Chemical signals)**	48: 1011-1021
Week 10: 3/8-3/12		
M 3/8	Nervous systems	48: 1021-1028
W 3/10	Sensory systems	49: 1045-1058
F 3/12	Movement and locomotion	49: 1063-1074
F 12/15 10:30-12:30	**EXAM IV: Material from Ch. 44, 45, 48, & 49 (from last exam)**	