Biology 206 – Introduction to Organismal Biology, 5 cr

Western Washington University
Winter 2009 –Jeff Young and Janice Lapsansky

Lecture:	BI 234, MWF, 10:00-11:20
Lab:	BI 355, Tuesday or Thursday (Lab exam dates TBD)
Office Hours:	Lapsansky – (BI 305): MW 9-10, F 1-2, and by appointment
	Young – (BI 412): MWF 1 - 2
Phone/email:	Lapsansky – 650-7337, lapsansky@biol.wwu.edu
	Young – 650-3638, young@biol.wwu.edu
Course web pages:	http://www.biol.wwu.edu/206
	http://www.biol.wwu.edu/young/206y.html
	http://fire.biol.wwu.edu/lapsansk/bio206.htm
Teaching Assistants:	Phil Dugger, Emily Grason

Please let us know ASAP If you require any 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 Description:
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.

Learning Objectives:
Class activities and evaluations are designed to help you meet the following learning outcomes. With your active participation in this course, you will be able to

- demonstrate your knowledge and application of the material presented in class, lab, and other course resources
- engage in the methods used to develop knowledge and understanding in biology
- frame questions and answer problems using the language and methods of biology
- integrate and relate concepts introduced in this class to topics you may be exposed to in other aspects of your life, including your academic and professional career goals

Please also use the specific set of learning objectives included in the PowerPoint presentations.

Course Policies: (Please see the last page of this syllabus for important course policies.)

Student Responsibilities and Evaluations:
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 a short essay question. Quizzes may be taken with a partner.

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

Students who choose P/F as a grading option must achieve at least 74% to pass.

Tentative Lecture Schedule:

Biology of Animals

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Please use the specific set of learning objectives included in each PowerPoint presentation.

	Lecture Topics	Assigned Readings
Week 6:		
W 2/11	Animal Form and Function	Ch. 41: 913-924
F 2/13	Introduction to Animal Homeostasis	Ch. 41: 925-931
Week 7:		
M 2/16 no classes	**Presidents Day**	
W 2/18	Animal Nutrition	Ch. 43: 957-959, 963, 964, 974
F 2/20	**Quiz:** Form, Function, & Nutrition	
	Circulation in Animals	Ch. 44: 994-1003
	Last day for late course withdrawal	
Week 8:		
M 2/23	Gas Exchange in Animals	Ch. 44: 978-994
W 2/25	Osmoregulation and Excretion	Ch. 42: 934-954
F 2/27	**EXAM III**	**Material covered in Ch. 41, 43 & 44, through gas exchange**
Week 9:		
M 3/2	Chemical Signals in Animals	Ch. 47: 1054-1065, 1068-1076 (& review pp. 162-168)
W 3/4	Nervous Signaling in Animals	Ch. 45: 1006-1022
F 3/6	Nervous Systems	…continued
Week 10:		
M 3/9	**Quiz:** Excretion & Signaling	
	Sensory Systems	Ch. 46: 1030-1039
W 3/11	Movement and Locomotion	Ch. 46: 1045-1051
F 3/13	Movement and Locomotion, cont'd	…continued
Monday, 3/16 10:30 - 12:30 pm	**EXAM IV**	**Material covered since Exam III**

Last day for late course withdrawal for students with withdrawal privilege is Friday, Feb. 20th

Lecture notes and reading assignments are subject to change.

Course Policies:

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 officially withdraw, 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.

Academic Dishonesty Policy: Western Washington University students are responsible for reading, understanding and following the policy and procedures regarding academic dishonesty as set forth in the *WWU Academic Dishonesty Policy and Procedure* (see Appendix D of the University Bulletin).

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.

Reasonable Accommodation Policy: It is the policy of Western Washington University to provide reasonable accommodation to the known physical, sensory, or mental limitations of qualified individuals except where such accommodation would impose undue hardship on the institution. To request accommodation, students must contact WWU disAbility Resources for Students at 360.650.3844 or www.drs.wwu.edu.