

Course Syllabus
PCB 4723 – Animal Physiology
Spring 2014
Dr. Graham A.J. Worthy
Wednesday/Friday 1:30-3:20
Biology 209

Contact information:

Office Hours: Whenever I'm not in class – just not Wednesday or Friday mornings.
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Course Description:

Functions of body processes occurring in animals, with an emphasis on vertebrate physiology.

Course Prerequisite:

PCB 3023 or consent of the instructor.

Course Objectives:

Upon completion of this course, each student will be able to:

- demonstrate a clear understanding of the principles of vertebrate physiology at various levels of biological organization;
- demonstrate knowledge of the technological advances that enable effective study of comparative animal physiology;

Recommended Texts:

“Animal Physiology: Mechanisms and Adaptations 5th ed” by Randall, Burggren, French, and Eckert
“Animal Physiology” by Hill, Wyse, and Anderson.
or any other recent comprehensive physiology text.

Evaluations:

Regular attendance at class is the minimum expectation. We will have a total of 4 exams with each one assessing your knowledge and understanding of approximately 5-6 lectures. None of these exams will include material that has already been covered on another exam.

Examination Dates and Weighting:

Your best exam will be weighted as 35% of your final grade, your poorest performance as 15% and the other two exams will be equally weighted at 25%.

Grade Categories	Date
Mid-term 1	January 29
Mid-term 2	February 26
Mid-term 3	March 28
Mid-term 4	April 28: 1:00 – 3:50

Grading: Your letter grade will be awarded on the following basis:

90% - 100%	A
88% - 89%	B+
80% - 87%	B
78% - 79%	C+
70% - 77%	C
68% - 69%	D+
60% - 67%	D
0% - 59%	F

Warnings:

1. You will receive the grade that you earn.

2. Failure to show up for an exam is an automatic zero. No exceptions (except medical emergencies). If you anticipate a conflict you must inform me and make arrangements at least 2 days before the exam.

3. Academic misconduct will not be tolerated. If you participate in any academic misconduct you will be given an automatic F in the course and the case will be reported to the Student Conduct Committee. Students must follow the University standards for personal and academic conduct as outlined in “The Golden Rule. Students are apprised when they are accepted at the University that they must be aware of and follow these policies of conduct. See <http://www.ucf.edu/goldenrule/> for details.

4. Class Decorum:

How you handle yourself reflects upon who you are, so behave in a way that shows respect for yourself and for those around you. Please turn off your cell phone before you come to class. You are expected to arrive on time and stay for the duration of the class. Coming late, stepping out, and leaving early are generally discourteous and can be disruptive. It is understood that urgent situations may arise which make these things necessary and excusable. In all other cases, this behavior should be avoided.

Course Schedule

Lecture	Date	Topic	Suggested Reading (based on Randall et al.)
1	January 8	General introduction to course	
2	January 10	Introduction to physiology	Chapters 3 and 4
3	January 15	Nutrition, feeding, and digestion.	Chapter 15
4	January 17	Energy metabolism	Chapter 16
5	January 22	Aerobic and anerobic metabolism	Chapter 16
6	January 24	Energetics of aerobic activity/ diving	Chapter 16
	January 29	Exam 1	
7	January 31	Circulation/Gas Transport	Chapter 12
8	February 5	Respiration 1	Chapter 13
9	February 7	Class cancelled	
10	February 12	Respiration 2	Chapter 13
11	February 14	class cancelled	Chapter 17
12	February 19	Thermal relations	Chapter 17
13	February 21	Thermal relations	Chapter 5 and 6
	February 26	Exam 2	
14	February 28	Diving	Chapter 5 and 6
	March 3-7	Spring Break	
15	March 12	Neurons	Chapter 10
16	March 14	Muscle	Chapter 7
17	March 19	Sensory processes	Chapter 9
18	March 21	Endocrinology Part 1	Chapter 9
19	March 26	Navigation/Migration	
	March 28	Exam 3	
20	April 2	Electric fish (Dr. Crampton)	Special guest lecture
21	April 4	Class cancelled	
22	April 9	Water/ion physiology 1	Chapter 14
23	April 11	Water/ion physiology 2	Chapter 14
24	April 16	Excretion 1	Chapter 14
25	April 18	Excretion 2	Chapter 14
	April 28	Exam 4 -- 1:00 – 3:50	

Note: the above schedule, policies and assignments in this course are approximate and subject to change by the instructor in the event of extenuating circumstances. **The dates of coverage of particular topics should be viewed as tentative.**

Viewing exams and posting grades:

Exams will be retained by the instructor. You may review your exam in my office during posted office hours or by appointment.