

BIOL 2108K / 002 – BIOLOGICAL PRINCIPLES II (Lecture/Lab) – SPRING 2013

Instructor: Dr. Matthew Weand

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Office Hours:

MWF 10-11
TR 1:30-2:30 *or by appointment*

Course Learning Outcomes:

- 1) To understand and describe the systematics and diversity of living organisms.
- 2) To identify and describe the homeostatic mechanisms that allow organisms to survive in their respective environments.
- 3) To understand and describe the fundamental anatomy and physiology of animals and plants.
- 4) To understand and describe the basic principles of ecology and population biology.
- 5) To develop laboratory skills that allow a student to recognize and observe the concepts listed above, as well as develop the ability to analyze experimental data.

Required Text – *Biology: the dynamic science (2st edition)*, by Russell, Wolfe, Hertz, Starr, and McMillan OR ANY RECENT COLLEGE BIOLOGY TEXT

Lecture – Monday, Wednesday, Friday 11:00-11:50 AM; Room E-222

Lab – You must be enrolled in **one** of the following lab sections
(**please refer to your class schedule**):

Section 063; Monday 2:00-4:50 PM; Room E-172A
Section 064; Wednesday; 2:00 PM – 4:50 PM; Room E-172A

Grades – Grades are divided up as follows:

4 Semester Exams (14% each)	56%
Final Exam (not cumulative)	14%
Lab Exercises 2 Lab Practicals 10% each Attendance and Participation 5%	25%
Quizzes	5%
Total	100%

Grading policy - The following **are the standards (%)** for assigning grades:

Letter Grade	Percent Score
A	90 – 100.0%
B	80 – 89.9%
C	70 – 79.9%
D	60 – 69.9%
F	Below 60.0%

Exams - Questions on exams can cover any of the lectures, labs, and any class handouts. Exams may also include questions that cover material from reading assignments. Exam dates are listed in the lecture schedule. The time and place of the final exam will be announced. If you have to miss an exam, **you must submit a signed note from a Doctor, Department Head, Coach, or Supervisor.** I must be notified **prior to an exam** that you will be absent (via phone or e-mail); if not, you will receive **a grade of zero** for the exam. Please see me immediately to schedule a time to make up an exam. If you do not make up an exam within a week after it was originally scheduled, you will receive **a grade of zero** for the exam. If you have an unexcused absence from an exam, you will receive **a grade of zero** for the exam.

Quizzes – Quizzes (\approx 8-10) will be given during the semester. Dates of quizzes will be announced in class during the semester. **Quizzes cannot be made up**, and you will receive **a grade of zero** for each quiz that is missed. **Your six best quiz scores will be used to calculate your final quiz average in the course.** (Quizzes make up 5% of your final grade in the course.)

Laboratory assignments – During the semester, **lab handouts/exercises will be posted on GeorgiaVIEW D2L** as PDF documents (go to <https://spsu2.view.usg.edu/> and log in using your SPSU e-mail username and password). **You will be fully responsible for downloading and printing out your lab handouts each week.** In most cases, labs will be submitted at the end of each laboratory period to the instructor who will check them for completeness. Your textbook will be a valuable resource for answering questions given on laboratory assignments, **so it is strongly recommended that you bring your text to each lab. Attendance to lab is mandatory. Laboratory assignments cannot be made up if you are absent from lab.**

Lab Practical Exams – You will take **two lab practical exams** (10% each; **20% towards your final grade in the course**) that will be based on exercises completed in lab during the semester. You will have access to your completed labs during the lab practical exams. Therefore, it is imperative that you attend lab every week and fully complete your laboratory assignments and have them checked by the instructor. Each lab practical will consist of 25 stations, where you may be required to identify a structure and describe its function, identify an organism and place it in the appropriate taxonomic group, or answer various questions related to lab. **Lab practical exams cannot be made up** (see dates on laboratory schedule).

***Helpful Hint:** Please carefully read the lab assignments before coming to lab. Also, a number of questions in the lab handouts can be answered before attending lab. This will significantly reduce the amount of time that you will have to spend in lab.

Attendance policy - There is no official attendance policy **in lecture**. However, attendance to class is essential for success in this course. **You are responsible for any and all announcements made in lecture and lab (including changes to the syllabus)**. (Please keep in mind that you **must attend** all labs.)

- I reserve the right to reward diligent students with perfect attendance and completion of labs (i.e., no absences of ANY kind) by increasing their final grade by 2%.

- I will consider chronically tardy students absent for the purposes of attendance. If a student is more than 10 minutes late, they will be counted as absent.

Lateness Policy – If you are late to class, please come in quietly and sit down at the first empty desk that you see. **DO NOT WALK IN FRONT OF THE PROJECTOR SCREEN OR STUDENTS TO GET YOUR IDEAL SEAT**. At this point, you will be considered a distraction and, as such, will temporarily forfeit your chance to get an ideal seat.

Withdrawal Policy – The last day to withdraw from this class with a **W** is **February 20, 2013**. Thereafter, I **will not** issue any withdrawals from the course, and you will receive an official grade.

Academic dishonesty – Students found cheating on exams, homework assignments, quizzes, or laboratory assignments will receive an **F** for the entire course. No exceptions are made in this case, so please work independently. Be sure to read the relevant section and know and understand the potential penalties in the University Academic Regulations in the current undergraduate catalog or on the campus web site. SPSU has an Honor Code and a new procedure relating to when academic misconduct is alleged. All students should be aware of them. Information about the Honor Code and the misconduct procedure may be found at <http://spsu.edu/honorcode/>.

**Students who feel they may need an accommodation based on the impact of a disability should make an appointment with the ATTIC (678.915.7361) to coordinate reasonable accommodations. The students are also welcome to contact the instructor privately to discuss one's specific needs.*

TENTATIVE LECTURE AND EXAM SCHEDULE

Week	Dates	Topics	Text Readings
1	7-Jan	Introduction Taxonomy and Classification Prokaryotes and Viruses	Chapter 23 Chapter 25
2	14-Jan	Protists	Chapter 26
3	21-Jan	MLK Jr. Day NO CLASS on Mon Jan 21 Fungi	Chapter 28
4	28-Jan	Exam 1 – Chapters 23, 25-26, 28 (Jan 28) Plant Diversity	Chapter 27
5	4-Feb	Plant Structure and Function	Chapter 31
6	11-Feb	Plant Structure and Function Continued	Chapter 32
7	18-Feb	Animal Diversity	Chapters 29 - 30
8	25-Feb	Exam 2 – Chapters 27, 29, 31-32 (Feb 25) Introduction to Animal Organization and Physiology	Chapter 36
9	4-Mar	SPRING BREAK	
10	11-Mar	Circulatory System Respiratory System	Chapter 42 Chapter 44
11	18-Mar	Immune System Digestive System	Chapter 43 Chapter 45
12	25-Mar	Exam 3 – Chapters 29-30, 36, 42-44 (Mar 25) Excretory System	Chapter 46
13	1-Apr	Nervous System Endocrine System	Chapters 37-38 Chapter 40
14	8-Apr	Muscles, Bones, and Body Movements Introduction to Ecology LIFE Video	Chapter 41 Chapter 49
15	15-Apr	Exam 4 – Chapters 37-38, 40-41, 45-46 (April 15) Population Ecology	Chapter 49
16	22-Apr	Community Ecology Ecosystem Ecology	Chapter 50 Chapter 51
17	29-Apr	The Biosphere	Chapter 52
		<i>Last Day of Spring Classes – April 29, 2013</i>	
		<i>FINAL (Chapters 49-52) - TBA</i>	

TENTATIVE LAB SCHEDULE

TENTATIVE LABORATORY SCHEDULE

WEEK #	WEEK OF	TOPIC	LAB EXERCISE
1	7-Jan	NO LAB	
2	14-Jan	Unicellular Organisms	1
3	21-Jan	NO LAB—MLK Holiday	
4	28-Jan	Fungi	2
5	4-Feb	Plants	3
6	11-Feb	Animal Diversity, part 1	4a
7	18-Feb	Animal Diversity, part 2	4b
8	25-Feb	Lab Practical #1	
9	4-Mar	Spring Break	
10	11-Mar	Animal Tissues	5
11	18-Mar	Circulation and Respiration	6
12	25-Mar	Frog Dissection	7
13	1-Apr	ELISA	8
14	8-Apr	Human Strength and Fitness	9
15	15-Apr	Life Table Analysis	10
16	22-Apr	Lab Practical #2	

***This lab schedule is subject to change at the discretion of the instructor.**

STUDY TIPS FOR THIS COURSE:

- *Read the textbook chapters carefully**, particularly the sections that are covered in lecture.
- *Review your lecture notes** at least three times per week.
- *Answer the Study Break questions** at the end of each chapter section in the textbook. (These questions might end up on an exam.)
- *Answer the Self-Test questions** at the end of each chapter. Be very careful using the answer keys in the appendix of your text. Your text is in its second edition, so there are some incorrect answers that made it through the initial editing process. Please verify the answers on your own.