## Fundamentals of Life Science II Spring 2012

Biology 2170 Section 003 TR 1:00-2:40 PM RH 1520

Staff: Dr. Sally E. Harmych

**Office:** WO1235K **Office Hrs:** M 1:00-2:00 pm

W 9:00 AM - 12:00 PM

F 1:00 PM - 2:00 PM, or by appointment

**Phone:** (419) 530 – 4585

**Email:** sally.harmych@utoledo.edu (I will also answer questions pertaining to the course via email)

## **Required Materials:**

Sadava, D., Heller, H. C., Orians, G. H., Purves, W. K., Hillis, D. M. 2008 *Life: The Science of Biology*, 9<sup>th</sup> *Edition*. Sinauer Associates, Inc. Sunderland, Mass.

**Study guide to accompany** *Life: The Science of Biology*, 9<sup>th</sup> *Edition*. Sinauer Associates, Inc., Sunderland, Mass.

Turning Technology's Radio Frequency "Clicker"

Course Websites: http://blackboard.utdl.edu The website provides information for the course such as the course syllabus, email and a discussion board. We will also be using **Bioportal**, the website associated with the textbook to complete online homework assignments. The web address is http://courses.bfwpub.com/life9e. This site includes the complete textbook with highlighting, note taking and in-text activities, course assignments, self-quizzing and much more. You should have received an activation code with your textbook.

#### **Evaluation**

**Lecture Questions:** You are required to bring your clicker to *every* class. You will be given 3-4 questions to answer during every class meeting. Correct answers are worth 0.5 points and incorrect answers are worth 0.3 points. Lecture questions cannot be made up if you miss class for any reason. These will account for 10% of your grade.

**Online Homework assignments:** You will be assigned two types of assignments on Bioportal. These will consist of prelecture quizzes that are due the day before the corresponding lecture for each chapter and pretest assignments which are due the day before each exam. Each assignment will be worth 10 points. These assignments will account for 10% of your grade. It is your responsibility to keep up with these assignments, *I will not extend due dates*.

**Lecture Exams:** You will be given four, one hour midterm exams each worth 100 points. The exams will consist of 50 multiple choice questions and will pertain to the material covered in lectures and the corresponding textbook material.

**Final Exam:** The final exam is comprehensive and will consist of 100 multiple choice questions (200 pts.). Make sure to check the date and time of the final exam so that you can schedule accordingly. "I have to work," is not a legitimate excuse for rescheduling the final exam.

\*Your final grade will be calculated from a combination of your Lecture Question points (10%), your online homework (10%.), the **best four (3)** of four (4) midterm exams (55%) and the final comprehensive exam (25%)

\*\*\*Academic dishonesty may lead to failure of this course. Read the University policy about this subject\*\*\*

**Grading Scale:** Exams will be scored as % correct points, which will correspond to a letter grade according to the table below. This scale is based on the assumption that knowledge of more than 50% of the material is needed to pass this course.

<b>GRADE</b>	% CORRECT	<b>GRADE</b>	%CORRECT
A	90 - 100	C	67 - 70
A-	87 - 89	C-	63 - 66
B+	83 - 86	D+	59 - 62
В	79 - 82	D	55 - 58
B-	75 - 78	D-	51 - 54
C+	71 - 74	F	0 - 50

<sup>\*\*\*</sup>Any student listed in the course after March 23rd can only receive a grade of A – F.

Any student who stops attending class after taking the first test will receive a grade of F for all the missed tests, *unless that student withdraws from the course by March 23rd*.

I will only assign **IN** grades in extraordinary cases when unexpected conditions prevent a student from completing the course within the term of enrollment. An IN grade must be removed by the end of the following semester.

### **Classroom Expectations:**

I expect that since you are taking this course you are interested in learning about the subject of biology. The best way to be successful is to read the text, attend lecture, take notes and do your online assignments. It is helpful if you read the text before attending lecture. When you come to lecture it is expected that your focus will be on the material covered, not your cell phone, latest email or Facebook postings, or today's newspaper. During lecture I will outline the subject matter and cover key points. In addition, attending lecture gives you an opportunity to ask questions about the material and helps me know when you are having difficulties. What is covered in lecture is much more likely to be seen on exams. I encourage you to ask questions if you are having difficulty. You can also ask me questions directly after class, during office hours, via email or over the phone. I am here to help you be successful, but I cannot do that if you do not ask for help.

Please bring a #2 pencil, an eraser and your valid UT student ID card to each examination. No student will be permitted to take the exam without proper identification.

**Examinations start and end at specified times.** Under no circumstances will students be admitted to an exam after the first student has completed the exam and left. If you must miss an exam you must contact me within 24 hours to schedule the makeup exam. When we meet you must have a written excuse. If proper documentation is not provided then the missed exam will be scored as your lowest exam score for the semester. If you know in advance that you must miss an exam for a legitimate reason then please see me to schedule an early exam.

**SI Sessions**: Our class is lucky to be participating in the Supplemental Instruction (SI) program here on campus. Throughout the semester study sessions will be held by trained SI leaders. These sessions give you an opportunity to review the material covered in class in a small group setting.

Please see me by the end of the first week of classes if you have special needs concerning testing. Make sure to bring me the proper documentation along with your full name and student number. You may take the exams in the Student Testing center (FH1080).

# Planned Outline of Lectures (subject to change, changes will be announced in lecture)

January	10 12	Intro. Chapter 2, section 4 Chapter 3: Proteins, Carbohydrates, and Lipids
January	17 19	Chapter 4: Nucleic Acids and the Origin of Life Chapter 5: Cells: The Working Units of Life
January	24 26	Chapter 6: Cell Membranes Chapter 6: Cell Membranes
January	31	Exam I (2.4, 3, 4, 5, 6)
February	2	Chapter 7: Cell Signaling and Communication
February	7	Chapter 7: Cell Signaling and Communication
	9	Chapter 8: Energy, Enzymes and Metabolism
February	14	Chapter 9: Pathways that Harvest Chemical Energy
	16	Chapter 9: Pathways that Harvest Chemical Energy
February	21	Chapter 10: Photosynthesis
	23	Exam II (7, 8, 9 & 10)
February	28	Chapter 11: The Cell Cycle and Cell Division
March	1	Chapter 11: The Cell Cycle and Cell Division
March 5-9		No Class - Spring Break
March	13	Chapter 12: Inheritance, Genes and Chromosomes
	15	Chapter 12: Inheritance, Genes and Chromosomes
March	20	Chapter 13: DNA and its Role in Heredity
	22	Chapter 13: DNA and its Role in Heredity
March	27	Exam III (11, 12 & 13)

	29	Chapter 14: From DNA to Protein: Gene Expression
April	3	Chapter 14: From DNA to Protein: Gene Expression
	5	Chapter 16: Regulation of Gene Expression
April	10	Chapter 16: Regulation of Gene Expression
	12	Chapter 18: Recombinant DNA and Biothechnology
April	17	Chapter 18: Recombinant DNA and Biothechnology
	19	Exam IV(14, 16 &18)
April	24	Chapter 19: Differential Gene Expression in Development
	26	Chapter 20: Development and Evolutionary Change
May	2	FINAL EXAM, 2:45-4:45 PM