# Spring 2014 BIOL2170-001: Fundamentals of Life Science II

Course Name: Fundamentals of Life Science II

Credit hours: 4

Prerequisite: Undergraduate level CHEM 1090 Minimum Grade of D- or Undergraduate level CHEM 1230 Minimum

Grade of D- or Undergraduate level BIOL 2150 Minimum Grade of D- or Chemistry Placement 20

Meeting: MTWR 8:00 am - 8:50 am SM2110

Instructor: Dr. Brenda Leady Office Location: WO1217 Office Phone: (419)530-2181

Office Hours: Tuesday and Thursday 1-3:30pm (or by appointment)

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## Course Description:

A general introduction to cell structure and function, energy processing in plants and animals, basic genetics, molecular biology and development.

#### Required:

Morris et al. Biology: How Life Works Online Homework - LaunchPad

Turning Technology's Response Card RF

Course Website:

BlackBoard contains all class information - grades, assignments, lecture handouts, homework, etc.

Online homework site - LaunchPad

# The following rules apply to all the exams and classes of this course:

- 1. I expect your full attention in class. When you are in class, you are there to pay attention and participate. Phones, iPods, pagers are turned off and ear buds are out. If you have an important call, take it outside the classroom with a minimum of disruption.
- 2. Examinations start and end at specified times. Under no circumstances will students be admitted to an exam after the first person has left the exam. Additional time will not be given to students who come late to an exam.
- 3. Be sure to bring two number 2 (#2) pencils, an eraser, and your valid UT student ID card to an examination.
- 4. All the examinations must be taken at the scheduled time. Missed exams can be made up as an essay exam covering the same material.
- 5. Please be considerate of your fellow students. During the time of an examination, quiet is to be maintained at all times. To be fair to everyone, I expect cell phones, pagers, iPods, etc. to be turned OFF and out of sight. Earbuds are to be removed. Anyone found looking at a digital device during an exam will be given an F in the course for academic dishonesty.
- 6. If the University is closed on a day scheduled for a test, your test will be given during the next time class is held.
- 7. I will post an answer key to check your bubble sheets. Errors in grading should be brought to my attention within <u>one</u> week of the time you receive your corrected examination. I do not allow you to keep the actual exam questions but you may make an appointment to look over missed questions.
- 8. If you have documentation from the Office of Academic Access, please see me before the first test to schedule your exams. Extended time is not given during the regular in class exams.

#### Evaluation:

# Clickers: DEADLINE TO BE REGISTERED IS January 15 at 8am

We will use Turning Technologies Response Card RF in class every day. I will ask several questions during the class period. A correct response is worth 1 point. An incorrect response is worth 0.5 points. I will take the final possible point total and adjust it by 15% to take into account missed classes or missed questions. There are no excused absences unless it is a several day absence with a medical excuse. The final point total will be 5% of the class grade. For example, if we accumulate 188 clicker points total. I drop that 15% so that 159.8 is a perfect score. Anyone over 159.8 does not get extra points. If you had 148 points that is  $148/159.8 = 0.93 \times 5\% = 4.7\%$  for your clicker part of the final grade. Register your clicker on our Black Board site. Carrying a clicker for a student who is absent with the intent to give the absent student points, is academic dishonesty. Both students (the present student with 2 clickers and the absent student) will receive a 0 for all clicker points for the term for academic dishonesty.

#### Homework

Athletes practice on a regular basis to train their muscles. They don't go into an event without hours of practice spread over weeks. For you to do well in biology, you can't cram the night before and expect to do well. You need to practice. Homework is practice for thinking like a biologist.

You will complete online homework assignments (LaunchPad) for 5% of your grade.

There are 2 types of assignments.

- First, you will have a "Pre-lecture" assignment due for each chapter. Read the text book first to become familiar with the material. Then answer 5 questions pertaining to that chapter. This gets you familiar with the material so that you are prepared for lecture.
  - These are due at 8am the day of lecture.
  - I will use the results to guide what I cover in class.
- Second, "Pre-exam" homework is due before each exam (except the final). Study for your exam first before starting the assignment. You will answer 10 questions that are similar to the in class exam questions. This will help you decide if you are prepared for the exam or not.
  - These are due at 8am the day of the exam.
  - These are more difficult questions requiring more thought and effort.

## Regular Exams:

4 multiple choice regular exams will be given. These exams are 50 multiple choice questions each worth 2 points. They will not be comprehensive but some concepts carry over from one exam to the next. Exams end at the end of the class period. If you arrive late, the exam is still due at the end of the class period. If you come in after the first person has left the exam, you will take the essay exam at a later time.

Exams taken at any time other than your regularly scheduled class time (early or late) are in essay format. Ten (10) essay questions will cover the same material as the exam. Contact your instructor to set up a time and place for an essay exam.

## Final Exam:

The final exam is comprehensive. The final will consist of 100 multiple choice questions covering the entire semester. Each question is worth 2 points.

Clickers	5%
Homework	5%
Regular exams	70%
Final exam	20%
	100%

# Academic dishonesty:

Academic dishonesty is a serious topic at the University of Toledo. The department policy on academic dishonesty is attached to the end of this syllabus.

Final grades will be determined based on the following scale.

Grade	% Correct	
Α	90-100	
A-	87-89	
B+	83-86	
В	79-82	
B-	75-78	
C+	71-74	

Grade	% Correct	
С	70-67	
C-	66-63	
D+	62-59	
D	58-55	
D-	54-51	
F	50-0	

## Other notes:

If you stop coming to class, you will receive an F unless you

- Drop the class by January 20
- Withdraw from the class at the registrar's office by March 21

The grade of **Incomplete (IN)** is assigned only in extraordinary cases when unexpected conditions prevent the student from completing the requirements of the course within the term of enrollment. In order to receive an IN you must be passing the course and make arrangements with me to complete your work.

Week	Date		Pre-Lecture Homework	Pre-exam Homework	Reminders
	January 6	cancelled			
	January 7	cancelled			
1	January 8	cancelled			
	January 9	Chapter 1: Introduction: Life	Due 8am Jan 15		
2	January 13	Chapter 2: Molecules of life	Due 8am Jan 15		
	January 14				
	January 15	Chapter 3: Nucleic acids and the encoding of biological information	Due 8am Jan 15		January 15 8am clicker registration deadline
	January 16				
	January 20			January 2	0 – drop deadline
	January 21				
3	January 22	Chapter 4: Translation and protein structure	Due 8am Jan 22		
	January 23				
	January 24				
	January 27	Exam 1 (Ch. 1-4)		Due 8am Jan 27	
4	January 28	Chapter 5: Organizing principles	Due 8am Jan 28		
	January 29				
	January 30				
	February 3	Chapter 6: Making life work	Due 8am Feb 3		
5	February 4				
	February 5				
	February 6				
	February 10	Chapter 7: Cellular respiration	Due 8am Feb 10		
6	February 11				
	February 12				
	February 13				
7	February 17	Chapter 8: Photosynthesis	Due 8am Feb 17		
	February 18				
	February 19				
	February 20			_	
8	February 24	Exam 2 (Ch. 5-8)		Due 8am Feb 24	
	February 25	Chapter 9: Cell communication	Due 8am Feb 25		
	February 26				
	February 27				
	March 3-6		Spring Break		

Week	Date		Pre-Lecture Homework	Pre-exam Homework	Reminders
	March 10	Chapter 10: Cell form and function	Due 8am March 10		
9	March 11				
9	March 12				
	March 13	Chapter 11: Cell division	Due 8am March 13		
	March 17				
	March 18				
10	March 19	Chapter 12: DNA replication and manipulation	Due 8am March 19		
	March 20				March 21 withdrawal deadline
	March 24	Exam 3 (Ch. 9-12)		Due 8am March 24	
11	March 25				
' '	March 26				
	March 27	Chapter 14: Mutation and DNA repair	Due 8am March 27		
	March 31				
4.0	April 1				
12	April 2		Due 8am		
	April 3	Chapter 15: Genetic variation	April 3		
	April 7				
40	April 8		D 0		
13	April 9	Chapter 16: Mendelian inheritance	Due 8am April 9		
	April 10				
	April 14	Chapter 17: Beyond Mendel	Due 8am April 14		
14	April 15				
14	April 16			Dun Orivi	
	April 17	Exam 4 (Ch. 14-17)		Due 8am April 17	
15	April 21	Chapter 19: Genetic and epigenetic regulation	Due 8am April 21		
	April 22	<u> </u>	·		
	April 23				
	April 24				Last day clicker questions

Final Exam: Monday April 28, 8-10am

#### Policy Statement on Academic Dishonesty

Academic dishonesty will not be tolerated. Among the aims of education are the acquisition of knowledge and development of the skills necessary for success in any profession. Activities inconsistent with these aims will not be permitted. Students are responsible for knowing what constitutes academic dishonesty. If students are uncertain about what constitutes plagiarism or cheating they should seek the instructor's advice. Examples of academic dishonesty include, but are not limited to:

- Plagiarizing or representing the words, ideas or information of another person as one's own and not offering proper documentation;
- Giving or receiving, prior to an examination, any unauthorized information concerning the content of that examination:
- Referring to or displaying any unauthorized materials inside or outside of the examination room during the course of an examination:
- Communicating during an examination in any manner with any unauthorized person concerning the examination or any part of it;
- Giving or receiving substantive aid during the course of an examination;
- Commencing an examination before the stipulated time or continuing to work on an examination after the announced conclusion of the examination period;
- Taking, converting, concealing, defacing, damaging or destroying any property related to the preparation or completion of assignments, research or examination;
- Submitting the same written work to fulfill the requirements for more than one course.

While academic integrity is particularly the responsibility of the student, the faculty members also have a responsibility. Assignments and tests should be constructed and proctored so as to discourage academic dishonesty. Faculty members are expected to inform their students explicitly as to what materials and procedures are authorized for use in the preparation of assignments or in examinations (e.g., the use of calculator, computer, text materials, etc.). Should cases of academic dishonesty be found among students, the instructor may choose to counsel the student, or the following sanctions may be imposed:

- The student may be assigned an F for the work in question.
- The student may be assigned an F for the course. In this case the instructor should inform the Dean and the student of this action. The Dean will make certain that the student receives the F grade and is not permitted to withdraw from the course.
- The student may be placed on probation or suspended for some definite period of time, dismissed or expelled by the Dean if either the seriousness of the offense or a record of repeated offenses warrants it. A notation that such a sanction has been imposed will be made part of the student's permanent record. It is expected that the Dean will consult with the instructor and the student in making such a judgment, and that the Dean will notify the student of the sanction imposed and of the appeals procedure.

A student found to be academically dishonest by a faculty member may appeal according to procedures approved by the respective colleges. The procedures for making a final appeal to the Student Grievance Committee may be found in the Student Handbook.