

# Biology 2170 Section 003

## Fundamentals of Life Science II

### Fall 2014

**INSTRUCTOR:** Dr. Scott Leisner  
**OFFICE:** 4223 Wolfe Hall

**OFFICE HOURS:** 2:00-4:00 M, W  
Other times by appointment only, but more time will be made available if necessary.  
There may be times that I cannot hold the above hours.

**PHONE:** 530-1549, 530-1550, 530-2065  
**EMAIL:** sleisne@utnet.utoledo.edu

**REQUIRED TEXT:** Morris et al. Biology: How Life Works. Freeman (2013)

**TIME AND LOCATION:** M-R                      8:00-8:50                      BO 1045

#### **COURSE REQUIREMENTS:**

Biology 2170 is an introductory course covering the science of Biology and is intended primarily for science majors. However, non-science majors who desire to gain greater knowledge of Biology than they can get from a general education survey course also take Biology 2170.

Because Biology 2170 will examine the basic functioning of cells, their metabolism, and their methods of information transfer an adequately prepared student for this course should have completed at least one course in high school Biology and had at least one course in high school Chemistry. Even though many students with no formal training in Chemistry successfully complete Biology 2170, it is recommended that students take the co-requisite Chemistry 1210 or 1230 course.

Because students will have to perform calculations for some of the course, it is expected that students taking Biology 2170 have elementary mathematical skills. The types of calculations that students may be required to perform will involve the use of decimals, logarithms, ratios and negative exponents. Students may use a scientific calculator to perform these calculations if they so desire. Students are also assumed to have knowledge of the metric system.

It is expected that all students will attend each lecture. Examination questions may be derived from both the lectures and the text assignments, so students are also required to read the appropriate chapters of the book. The textbook for this class is required for Biology 2170 because it may help to clarify materials that students may have found unclear in the lectures. Because the textbook contains a great deal of information, it may be difficult for students to focus on the key concepts.

All lectures will be given at the specified time. It is appropriate and encouraged, for students to ask questions during the lecture and I will answer these questions, time permitting.

### **COURSE ORGANIZATION:**

This course meets Monday through Thursday from 1:00-1:50 in Bowman-Oddy room 1045. Remember, I will be covering a significant amount of material in this course and it usually works best to keep up with it rather than fall behind and try to catch up the night before the examination.

### **GRADING:**

Final grades will be assigned using The University of Toledo's twelve point grading scale: A, A-, B+, B., B-, C+, C, C-, D+, D, D-, F. The range of scores corresponding to each of these various categories may vary slightly from examination to examination. Please note that I am not required to give a specified number of any grade (from A's to F's).

#### **Grade Assignment (percentages):**

A	100-90	B+	85-84	C+	75-73	D+	59-57
A-	89-86	B	83-78	C	72-62	D	56-52
		B-	77-76	C-	61-60	D-	51-50
F	<50						

Your final grade will be based on homework, 3 in-class exams, and a final exam.

<b>Homework:</b>	<b>50 points</b>
<b>Exam I:</b>	<b>100 points</b>
<b>Exam II:</b>	<b>100 points</b>
<b>Exam III:</b>	<b>100 points</b>
<b>Exam IV:</b>	<b>100 points (drop lowest exam)</b>
<b>Final Exam:</b>	<b>200 points</b>
<b>Total:</b>	<b>550 Points</b>

### **Homework assignments:**

Homework assignments will usually be assigned on the Thursday of each week when there is no exam. However, no homework will be assigned on the first week of the semester. Homework assignments are due on the following Monday at the start of class. Homework assignments not turned in within the first 5 minutes of class on the following Monday are considered late and will be assigned a 0. Each homework assignment is worth 5 points.

**Exams:**

Each exam (except the final) will be given over material covered after the prior exam. You get to drop your lowest mid-term exam score, making your points for mid-term exams a total of 300. The final exam will be comprehensive and is over material covered over the entire semester. **Please note:** If you believe there is an error in grading your exam, it is your responsibility to bring this to the attention of the instructor within one week of the return of the exam. After that time, all grades are considered to be final.

**Basic Examination Rules:**

1. All examinations must be taken at the scheduled time with the section for which you are officially registered.
2. Examinations will start and end at the specified times. Students arriving more than 10 minutes after the examination has begun will not be admitted **under any circumstances.**
3. Be sure to bring at least two number 2 (#2) pencils and your valid UT student ID card to each examination.
4. During the time which an examination is being taken, quiet is to be maintained **AT ALL TIMES!** Please be considerate of your fellow students. If you need to talk about something please do it outside of the room where examination is being taken. Violators of this rule will have their examinations confiscated and they will receive a grade of F for the examination.
4. I do not give make-up mid-term examinations. If you miss an examination due to illness, family crisis, etc, then that will be the examination that you drop. If you miss more than one mid-term examination, you will receive the grade of F in the course.
5. If you miss the final examination, you must supply Dr. Leisner with a written excuse and obtain permission to take the make-up examination. Notification must be made within 48 hours of the missed examination. Make-up examinations are arranged by appointment with Dr. Leisner. The make-up examination will completely consist of essay questions and it must be completed by the end of final exam week during the academic quarter during which the course was taken.
6. If you feel that an error in grading your examination has occurred, you must respond within one week of receiving the examination back from Dr. Leisner.  
Otherwise, Dr. Leisner will assume that there is no problem and the grade will be recorded as it stands.

**GRADES AND WITHDRAWALS**

I do not assign grades of DR (drop). You may withdraw from the course if you want to but to do this you must fill out a withdrawal slip and process it through official University channels by the posted deadline. Grades of I (incomplete) will only be assigned

if the final examination is not taken and I am supplied with a written verifiable excuse for your absence, and notified in writing prior to the last day of final exam week of your intention to make it up. Missing more than one mid-term examination or skipping the final examination will result in a grade of F.

# STATEMENT ON ACADEMIC DISHONESTY

## Department of Biological Sciences

Academic dishonesty by students enrolled in undergraduate or graduate courses and programs offered by the Department of Biological Sciences will not be tolerated. Academic dishonesty includes but is not limited to:

1. Obtaining assistance from another individual during an examination.
2. Giving assistance to another individual during an examination.
3. The unauthorized use of study material or textbooks during an examination.
4. Changing answers on an examination after it has been returned and then submitting it for regrading.
5. Plagiarizing written assignments. Plagiarizing includes but is not limited to: a) Copying laboratory reports from previous years, b) copying or paraphrasing reports, term papers, or theses prepared by other students, c) unauthorized collaboration in the preparation of reports, term papers, or theses, and d) use of another author's materials without appropriate acknowledgment through quotation and citation.
6. Attempting to bribe or otherwise induce an instructor to alter either a grade or examination score.
7. Obtaining or attempting to obtain a copy of an examination prior to its administration.

In accordance with policies presented in The Student Handbook and The University Catalog, Instructors have the responsibility and right to report cases of alleged dishonesty to departmental, college, and university administrative units. Students involved in academic dishonesty may expect to receive a grade of F on specific assignments as well as in the course where the assignment was made. In addition, disciplinary action may be recommended through appropriate college and university disciplinary committees. Please consult your instructor for instructions on the implementation of this policy.

# Topics Covered For Biology 2170-003 (Fall 2014)

**Topics will be covered as listed below. The relevant textbook chapters are also shown**

Chapter 1: Introduction: Life

Chapter 2: Molecules of life

Chapter 3: Nucleic acids and the encoding of biological information

**Exam I  
Sept. 11**

Chapter 4: Translation and protein structure

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Chapter 12: DNA replication and manipulation

Chapter 6: Making life work

Chapter 7: Cellular respiration

**Exam II  
Oct. 9**

Chapter 8: Photosynthesis

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Chapter 5: Organizing principles

Chapter 9: Cell communication

Chapter 10: Cell form and function

**Exam III  
Nov. 6**

Chapter 11: Cell division

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Chapter 14: Mutation and DNA repair

Chapter 15: Genetic variation

Chapter 16: Mendelian inheritance

**Exam IV  
Dec. 4**

Chapter 17: Beyond Mendel

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## Chapter 19: Genetic and epigenetic regulation

Chapters**Week 1**

1-2

**Week 2**

2-3

**Week 3**

3-4

**Exam I (Sept. 11)**

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**Week 4**

12

**Week 5**

6

**Week 6**

7

**Week 7**

8

**Exam II (Oct. 9)**

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**Week 8**

5

**Week 9**

9

**Week 10**

10

**Week 11**

11

**Exam III (Nov. 6)**

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**Week 12**

14

**Week 13**

15

**Week 14**

16

**Week 15**

17

**Exam IV (Dec 4)**

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**Week 16**

19

**Final Exam: Monday Dec. 15, 8:00-10:00**