Lecture Syllabus

http://herbarium.millersville.edu/101.php

Lecture Times, Room, & Instructor

Location & Time: Caputo 210, W & F 12-1
Instructor: Dr. Christopher Hardy, Ph.D.
Office: Roddy 271
Tel: 871-4317
Office hours: M 2-4, R 2-3, F 1-3

Lecture Schedule

<table>
<thead>
<tr>
<th>Lecture Topic</th>
<th>Reading</th>
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<tr>
<td>Week of Aug 27: Biological Chemistry</td>
<td>Chapter 2</td>
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<td>Week of Sep 03: Biological Chemistry</td>
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<td>Week of Sep 10: Cells</td>
<td>Chapter 3</td>
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<td>Week of Sep 17: Membranes</td>
<td>3.3; 4.5</td>
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<td>Week of Sep 24: Enzymes</td>
<td>4.4</td>
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<td>Week of Oct 01: Photosynthesis &amp; Respiration</td>
<td>5.1-5.5; 6.1-6.9</td>
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<td>Week of Oct 08: Exam 1 (Wed, Oct 10) Photosynthesis &amp; Respiration</td>
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<tr>
<td>Week of Oct 15: Chromosomes &amp; Cell Division</td>
<td>10.1; 8.1, 8.3-8.7</td>
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<td>Week of Oct 22: Chromosomes &amp; Cell Division</td>
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<td>Week of Oct 29: Mendelian Genetics</td>
<td>Chapter 9; Chapter 10</td>
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<td>Week of Nov 05: DNA, Transcription, &amp; Translation</td>
<td>7.1-7.7; 8.2</td>
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<td>Week of Nov 12: Exam 2 (Wed, Nov 14) DNA, Transcription, &amp; Translation</td>
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<td>Week of Nov 19: No class (T-day recess)</td>
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<td>Week of Nov 26: Evolution</td>
<td>Chapter 12; Chapter 13; 14.6;</td>
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<td>Week of Dec 03: Evolution</td>
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<td>Week of Dec 10: Finals</td>
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<td>Final Exams: BIOL 101.01 = Thursday, Dec 13, 12:30-2:30 PM</td>
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Materials

3. Required for Lab: 3-ring binder or folder into which notes from lab and recitation, as well as returned quizzes and other handouts go.
4. Required Generally: Scientific calculator for occasional use on lecture exams, routine use in lab and recitation.
5. Recommended: Spiral-bound notebook for notes in lecture; separate notebook or looseleaf supply for lab; 3-ring binder if you have the looseleaf version of the textbook.

**Grading**

A point system is employed. Final letter grades are earned on basis of percentage of total points available as follows:

- A 93-100%
- A- 90-92%
- B+ 87-89%
- B 83-86%
- B- 80-82%
- C+ 77-79%
- C 73-76%
- C- 70-72%
- D+ 67-69%
- D 63-66%
- D- 60-62
- F <60%

**Lecture**

- Lecture Exam 1 100
- Lecture Exam 2 100
- Final Lecture Exam (1/3 cumulative) 150

**Lab & Recitation**

350 (as per lab syllabus)

Total points possible 700

- You must take exams on their regularly scheduled date and time.
- Regardless of the number of points your lab/recitation instructor assigns in lab or recitation, your final lab or recitation score will be scaled to the 350 course points allotted by Dr. Hardy.

**Objectives**

1. Identify and name model organisms commonly used in biological research.
2. Classify organisms into domains, kingdoms or clades based on observable characteristics and understand where the organism fits into the organizational hierarchy of the biosphere.
3. Develop a hypothesis and design a controlled experiment to test its validity.
4. Conduct basic scientific experiments using standard laboratory equipment.
5. Explain the relationship between chemical structure and basic biological processes.
6. Describe different types of macromolecules found in all organisms and discuss the relationship between their structure and function.
7. Identify cells as the basic units of life and describe cell structure in prokaryotes and eukaryotes.
8. Discuss the nature of enzymes and how they affect biological reactions.
9. Describe key biochemical pathways for energy acquisition and utilization in living systems.
10. Apply principles of inheritance at molecular and organismal levels and recognize different mechanisms for reproduction.
11. Explain how DNA controls cell structure and function and transfer this information to future generations.

**Special Needs**

Inform the Office of Learning Services (Lyle Hall) and your instructor immediately if you have disabilities or special needs that might affect your performance in this course. They will do their best to accommodate you as appropriate.

**Attendance**

Lecture: You are responsible for all material covered, whether or not you are present in lecture. Lab & Recitation: Required. Details in your lab/recitation syllabus.

**Honesty**

Cheating or plagiarism results in a zero for the assignment or exam, or worse. There is no distinction between copying or providing answers in this regard. Millersville University's Academic Honesty Policy is found in the Undergraduate Catalog on pp 73-74 (http://www.millersville.edu/catalogs/undergraduate/index.pdf).

**Title IX**

Millersville University and its faculty are committed to assuring a safe and productive educational environment for all students. In order to meet this commitment, comply with Title IX of the Education Amendments of 1972, 20 U.S.C. §1681, et seq., and act in accordance with guidance from the Office for Civil Rights, the University requires faculty members to report to the University’s Title IX Coordinator incidents of sexual violence shared by students. The only exceptions to the faculty member's reporting obligation are when incidents of sexual violence are communicated by a student during a classroom discussion, in a writing assignment for a class, or as part of a University-approved research project. Faculty members are obligated to report to the person designated in the University Protection of Minors policy incidents of sexual violence or any other abuse of a student who was, or is, a child (a person under 18 years of age) when the abuse allegedly occurred.

Information regarding the reporting of sexual violence, and the resources that are available to victims of sexual violence, is available at http://www.millersville.edu/sexualviolence/index.php.