

**Biology 120-01**  
**General Biology I**  
**Fall, Term I, 2002-2003**

Course Text: *Life: The Science of Biology*. 6<sup>th</sup> Edition. Authors: Purves, Sadava, Orians, and Heller. ISBN: 0-7167-9852-2. Published by Sinauer Associates, Inc.

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Course Time and Location: MWF 1:00-1:50 pm at Life Science 115.

Office Hours: From 2:00 – 3:00 MWF or by appointment in my office (315, Ford Life Science Building).

Course Description: Introduction to biological phenomena designed to acquaint the student with biological principles and their applications to living systems. Emphasis is on structure and function at the molecular-cellular level of organization in plants and animals. Also includes an analysis of the basic principles of inheritance as seen in various living forms.

Attendance: Attendance for lecture is mandatory. Failure to attend class will significantly affect your grade. Material missed due to lack of attendance is the student's responsibility to acquire. Attendance for exams is required. Only individuals enrolled in the course are allowed to attend lectures and exams.

Exams: There will be four exams consisting of three lecture exams worth 50 points each and a final exam worth 100 points for a total of 250 exam points. The final exam is partially comprehensive, covering all the material from the semester. Un-excused missed exams will be given a grade based on the following formula.

missed exam grade = sum of remaining exam points/ total points

Un-excused absence at the final exam will result in a grade no better than a 60% [C-, assuming 3 perfect scores on the 3 lecture exams (150 points) divided by the total points for the course (250)].

Excused absences must be arranged 24 hours prior to or after the exam-in-question's scheduled date.

Service Learning: Service learning is provided under the direction of faculty and UDM's Leadership Development Institute. The goal of service learning is to give students the opportunity to utilize their developing skills within their fields of study at non-profit organizations. UDM's Leadership Development Institute will describe the mutual goals and opportunities available to students enrolled in BIO 120. Students involved in Service Learning will volunteer at the Science Center on Saturday or Sunday afternoons, and



- 23 **First exam, covering material from 9/4 to 9/20**  
25 Chapter 6- Energy, enzymes, and metabolism  
27 Chapter 6 and Chapter 7- Cellular pathways that harvest chemical energy.
- 30 Chapter 7 and Chapter 8- Photosynthesis: Energy from the sun.

#### October

- 2 Chapter 8  
4 Chapter 9- Chromosomes, the cell cycle, and cell division.
- 7 Chapter 9 and Chapter 10- Genetics: Mendel and beyond.  
9 Chapter 10 and Chapter 11- DNA and its role in heredity.  
11 Chapter 11
- 14 **Second exam, covering material from 9/25 to 10/11**  
16 Chapter 12- From DNA to Protein: Genotype and phenotype.  
18 Chapter 12
- 21 Chapter 13- The genetics of viruses and prokaryotes.  
23 Chapter 13 and Chapter 14- The eukaryotic genome and its expression.  
25 Chapter 14
- 28 Chapter 17- Recombinant DNA and biotechnology.  
30 Chapter 23- Reconstructing and using phylogenies.

#### November

- 1 Chapter 25- The origin of life on Earth
- 4 **Third exam, covering material from 10/12 to 11/2**  
6 Chapter 26- Bacteria and archaea: The prokaryotic domains.  
8 Chapter 26
- 11 Chapter 27- Protists and the dawn of the eukarya.  
13 Chapter 27  
15 Chapter 30- Fungi: Recyclers, killers, and plant partners.
- 18 Chapter 28- Plants without seeds: from sea to land  
20 Chapter 28  
22 Chapter 29- The evolution of seed plants.
- 25 Chapter 29 and Chapter 34- The plant body.  
27 Chapter 34  
29 **Thanksgiving recess**

December

2 Chapter 35- Transport in plants.

4 Chapter 35

6 Chapter 38- Reproduction in flowering plants.

10 **Exam 4, 2:00-3:50 pm covering material since 11/6, Service Learning Survey**