

# BIOL 1120-003 - SURVEY OF BIOLOGY

## Syllabus – Spring Semester 2011

### GENERAL COURSE INFORMATION

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**Phone:** 419.530.5505 or 419.530.2065  
(Messages returned promptly)

**Hours:** **Tuesdays:** 8:00 p.m. - Biology 1120 Chat Room

**Thursdays:** 8:00 p.m. - Biology 1120 Chat Room #1  
(Other Times by Appointment)

**Texts:** Mader, Sylvia S., 2010. *Essentials of Biology*  
(**Second Edition**) McGraw Hill, Inc. (Required).  
ISBN: 9780077280093. MHID: 0077280091.

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### COURSE OVERVIEW

Biology 1120 section 003 is a distance learning (DL) course. It begins on January 10, 2011 and ends on May 6, 2011. During that period of time you may complete the course from any location in the world providing you have the required textbook and an adequate computer with reliable access to the internet. The text I have selected for the course is the **second edition** of a recent state-of-the-art product for non-science majors entitled *Essentials of Biology* authored by Sylvia Mader and published by McGraw Hill, Inc. It is stocked at the University of Toledo's Bookstore in the Student Union on the Bancroft campus, and may be purchased in person, online at [www.utoledo.Bkstore.com](http://www.utoledo.Bkstore.com) or by phone (419.530.2516). I am assured that all orders placed electronically or by phone are shipped within 1-2 days from the time they are received. You may, of course,

choose to obtain your text from other booksellers. It is marketed by the Student Bookstore on Bancroft Street adjacent to campus. It is also available from a number of online booksellers. Finally, you may choose to purchase a less expensive electronic version of the text. For information on this option I recommend that you visit <http://textbooks.uso.edu/>. You may search this site for your text using the ISBN listed above. Be sure to read the information presented on the site before making your decision to purchase an electronic text. Regardless of where you purchase your text or which version you choose, **please have it on hand by the beginning of class on January 10.**

All components of this course will be delivered using Blackboard (4.0)/WebCT (Web Classroom Tools), a comprehensive software package that is managed by UT's Learning Ventures Division. The Blackboard/WebCT-based home page for the BIOL 1120 course may be accessed on January 10 by logging onto [www.dl.utoledo.edu](http://www.dl.utoledo.edu). When the page opens, navigate to the pull down menu for "select a system", click on <WebCT4 (Bb4) Fall>, enter your UTAD username and password in the appropriate boxes, and click on <BIOL 1120 – Spring 2011>. Once you have successfully reached the course homepage, select the link to <course content> and click on <Start Here – Syllabus/FAQ>. Study the Syllabus, review the **Frequently Asked Questions**, and begin the class.

During the semester you may communicate with both your classmates and me by using the Blackboard/WebCT e-mail system, the course bulletin board and the chat rooms. **To help assure a successful experience, be sure to check the course bulletin board and your e-mail at least once each day after the class begins.** If you are new to online classes, the UT Learning Ventures Home Page contains a wide variety of resources to help you navigate Blackboard/WebCT. If you experience technical difficulties with any aspect of the Blackboard/WebCT system, feel free to contact the Learning Ventures Help Desk at 419-530-8836 or on the program's website.

## **COURSE PERSPECTIVES, GOALS AND LEARNING OUTCOMES**

Biology 1120 is a basic, introductory level course that is designed for non-science majors. In fact, it is most frequently taken to fulfill part of the general education or "core" requirement for natural sciences at the University of Toledo and, through the transfer process, for many other institutions around the country. There are no required science pre-requisites. It is designed to be a survey course -- that is, to provide an opportunity for participants to obtain an overview of many areas of biology. Students who successfully complete this course will have explored and gained an understanding of: (1) The nature of science and how scientific knowledge differs from other kinds of knowledge, (2) the properties and characteristics of living organisms, (3) why the knowledge of basic chemistry principles is essential for the study of biological systems, (4) modern ideas about the structure and function of cells, (5) principles of inheritance and their relevance in modern medicine, (6) evolution and ideas about the origin of life that have emerged from scientific studies, (7) the diversity of animal life on the earth, (8)

animal structure and function with emphasis on the various organ systems, and (9) selected issues in ecology and environmental biology. After completing the assigned material in each of these areas of the course, students should be able to (a) identify scientific language, concepts, assumptions and processes, (b) demonstrate knowledge of scientific methods and reasoning in science, (c) analyze and interpret scientific evidence, (d) demonstrate when scientific evidence supports a given conclusion and (e) demonstrate knowledge of the impact of scientific discovery on human thought and society.

In order to accomplish these learning outcomes with a minimum of difficulty, certain requirements must be met. First, assigned readings must be completed and the subject material in those assignments mastered at an acceptable level. As you work your way through this material, keep in mind that you are not expected to assimilate and master every fact. But, it is important that you develop an understanding and appreciation for some of the really fascinating and interesting things that applications of scientific methodology have revealed about living organisms. Second, you must complete and earn acceptable scores on the quizzes that are scheduled throughout the semester. Specific information about these instruments is included in the section below.

## **ASSESSMENT**

Grades in this course will be based on your performance on 15 weekly quizzes. Each of these will be made available in the quiz room on the Biology 1120 homepage by 9:00 a.m. on scheduled Friday's during the semester beginning week #1. **Each must be completed and submitted for grading by 9:00 a.m. the following Monday.** Specific instructions for completing the quizzes will be provided weekly on the Blackboard/WebCT Bulletin Board. Each quiz is worth 50 points, and covers material from 1 or 2 assigned chapters in the textbook. Quizzes are open book. However, they are not intended to be collaborative exercises, and each of you may be required to affirm in writing that work submitted for a grade is wholly your own. Each quiz may include a variety of question types including multiple choice, matching, fill-in-the-blank, single-sentence definitions or explanations, comparing and contrasting terms, short essays and problems to solve. The chapters covered on each quiz are listed in the schedule presented below. I will limit the amount of time during which you may complete quizzes within the periods they are available.

Answer keys for quizzes as well as corrected copies of the actual quizzes you submitted can be accessed in the quiz room after I announce that the results have been released. Scores may also be found in your grade book. Errors in grading or challenges to the questions must be brought to my attention via e-mail no later than one week following the release of a score. After that period of time has elapsed, I will assume that there is no problem and the recorded grade will stand.

During the spring semester a total of 750 points may be earned in this course. Grade equivalents for earned points are listed in the table below. Depending on overall class performance, the breakpoints for the various grade categories **may** be lowered at the conclusion of the semester. However, they will never be raised. Further, if the mean scores on individual quizzes are not within a range that I consider reasonable for a class of this nature, I will make appropriate adjustments.

Biology 1120 – Table of Suggested Grade Equivalencies\*

<u>Percent of Total Pts</u>	<u>Grade</u>	<u>Percent of Total Pts.</u>	<u>Grade</u>
90-100	A	70-74	C
88-89	A-	68-69	C-
85-87	B+	65-67	D+
80-84	B	60-64	D
78-79	B-	58-59	D-
75-77	C+	Below 58	F

\*Values in this table are subject to change after end-of-semester adjustments are made

**You may calculate your grade anytime during the semester by adding up the points you have earned, dividing that number by the number of points possible up to that time, multiplying the resulting decimal by 100 and finding the grade equivalency for that percentage in the table above. Please note** that grades of incomplete (I) will be assigned by this instructor only in extraordinary cases when unforeseen circumstances prevent a student from completing the requirements of the course within the normal dates of enrollment.

## PREPARING FOR QUIZZES

As a rule of thumb, I recommend that you prepare for the quizzes in exactly the same manner as you would for face-to-face classes that do not allow open book testing. Normally you will be required to complete a quiz and submit it for grading in a seventy-five minute period. That does not allow sufficient time to rush through the assigned chapters in search of a correct answer. Further, many of the test items presented will require some level of analysis and the integration of concepts from different areas of the various chapters. **So, heavy dependence on the text or other materials to compensate for a lack of preparation and learning is not a good way to assure success.** Finally, while everyone learns in different ways and with different levels of efficiency, I recommend that preparation for quizzes include **but not be limited** to the following activities:

1. **Two (2) thorough readings of each assigned chapter.**
  - a. It is a good idea to begin your reading by looking over the **abbreviated outline** that appears on the opening page of each

chapter. This helps establish perspective and focuses your reading effort.

- b. Before proceeding into the body of the chapter, be sure to review the **learning outcomes** provided by the author. In a broad sense these statements help frame the goals that you should seek to achieve while studying the chapter contents. They may be accessed from either the course homepage or the course menu by clicking <course content> and choosing the desired chapter.
2. **Paying close attention to the chapter illustrations and their captions.** You will quickly discover that your author has done an excellent job of integrating the text material with the illustration program. This approach will be especially valuable for visual learners.
  3. **Integrating lecture power point presentations with your reading.** PowerPoint lecture presentations for each chapter may be accessed from either the homepage or course menu by clicking <PowerPoint Slides> and opening the desired chapter. **Note: these are large files and sometimes take several minutes to load.** Also, they require that you have MS PowerPoint installed on your computer. Consult the Learning Ventures Help Desk if you need a free download copy of PowerPoint Viewer in order to use these files.
  4. **Integrating Chapters and Animation Power Point Presentations.** Many of the biological processes and phenomena described in the chapters of your text have been transcribed into animated power point slides. The animation of otherwise static text figures greatly enhances their learning value. Chapter animations can be accessed from either the homepage or course menu by clicking on <Animations> and choosing the desired chapter. Files are relatively small and will generally open quickly.
  5. **Making use of chapter summaries for review..**
  6. **Mastering the “Key Terms” listed at the end of each chapter.** The mastery of key terms can be greatly facilitated by using the virtual “Flash Cards” that can be accessed on either the homepage or course menu by clicking <Course Content> and opening the desired chapter.
  7. **Making “Self-Testing” a major part of your study plan.** Self-testing should include but not be limited to:
    - a. Working through the “**Check your Progress**” boxes that appear throughout the chapters in your text.

- b. Answering the questions that appear in the “**Testing Yourself**” areas at the conclusions of the chapters. The answers to the majority of these questions are provided in Appendix A at the end of your book.
  - c. Working through the “**Thinking Scientifically**” exercises that appear at the chapter conclusions.
  - d. Completing the **Review Questions** that are keyed to the chapters of your text. These may be accessed from either the homepage or the course menu by selecting the <quiz room> and clicking on the the Review Question Set for the desired chapter(s).
  - e. Making up your own quizzes and answering the questions for review. If this is done conscientiously you will address any topic I might include on a quiz.
- 8. Using chapter outlines to review chapters prior to quizzes.**  
Comprehensive chapter outlines may be accessed on either the homepage or course menu by selecting <Chapter Outlines> and scrolling to the desired chapter.
- 9. Asking questions.**  
Questions about course content may be posted on the bulletin board or through e-mail correspondence with your instructor or classmates, and participating in group study sessions that evolve in the chat rooms.

## **RETAKEING QUIZZES**

In general, I do not permit the retaking of a quiz except in very rare instances where technical problems are encountered that prevent it’s completion or submission. In these cases, if I am made aware of a problem before a quiz is due, and verify from my login register that there was a computer glitch or technical problem with Blackboard/WebCT, I will reset the quiz and allow you to start over with a newly generated version. If I hear about the problem after the quiz is due, and verify from my login register that there was a computer glitch or problem with WebCT/Blackboard, I will permit you to take a make-up quiz at its scheduled time. This policy has proven fair and useful in the past, and I anticipate that situations will arise in which it is beneficial to many of you during the current semester.

## **MAKING-UP MISSED WORK**

While I believe that the posted schedule of quizzes for this semester is more than sufficient to accommodate most of your needs, I am well aware that family,

work and health issues sometimes make it difficult to complete assigned work in a timely fashion. When these issues arise and you are unable to take a quiz at the scheduled time, there may be an opportunity for you to make-up the work. Specifically, make-ups will be administered according to the following guidelines: (1) Make ups for missed quizzes will be available over the three day end-of-week quiz period following that during which the original quiz was scheduled (See the schedule of reading assignments and quizzes in the table above). They will be accessible only to those who did not take the originally scheduled quiz. If you have already taken a quiz, Blackboard/WebCT will not permit you to logon to the make-up. (2) Make-ups will be posted in the exam room at 9:00 a.m. on Fridays and will be available until 9:00 a.m. the following Monday—just like our regularly scheduled end-of-week quizzes. **THIS MEANS THAT THOSE OF YOU TAKING A MAKE-UP WILL HAVE TO COMPLETE MORE THAN ONE QUIZ IN A SINGLE END-OF-WEEK PERIOD.** (3) Make- up quizzes will be identical to the regularly scheduled ones with respect to the length of time allowed for completion, number of questions included, point values of questions, databases used as sources for questions and any adjustments applied by the instructor to earned scores of students taking the originally scheduled quiz. (4) There will be no make-up available for the last end-of-week quiz of the semester. (5) **The maximum number of make-up quizzes that are permitted during a given semester is two (2).** This number may be exceeded only if you have technical difficulties or other very extenuating circumstances and obtain my approval. It is your responsibility to keep track of the number of make ups that are take. (6) Following each regularly scheduled quiz of the semester I will notify by Blackboard/WebCT email all students who are eligible to take the make-up, and provide instructions for accessing the make up work.

**BIOLOGY 1120 (DL Section)**  
**SCHEDULE OF ASSIGNMENTS AND QUIZZES**

**Spring Semester 2011**

<b>Week # and Beginning Date (dd/mm/yyyy)</b>	<b>Reading Assignments</b>	<b>Material on Regularly Scheduled End-of-Week Quiz</b>	<b>*Make-up Quiz</b>
1 (01/10/2011)	Syllabus and Chapter 1	(Q1) Syllabus and Chapter 1	No Make-up this week
2 (01/17/2011)	Chapters 2 and 3	(Q2) Chapters 2 and 3	(Q1) Syllabus and Chapter 1
3 (01/24/2011)	Chapters 4 and 5	(Q3) Chapters 4 and 5	(Q2) Chapters 2 and 3
4 (01/31/2011)	Chapters 6 and 7	(Q4) Chapters 6 and 7	(Q3) Chapters 4 and 5
5 (02/07/2011)	Chapters 8 and 9	(Q5) Chapters 8 and 9	(Q4) Chapters 6 and 7
6 (02/14/2011)	Chapters 10 and 11	(Q6) Chapters 10 and 11	(Q5) Chapters 8 and 9
7 (02/21/2011)	Chapters 12 and 13	(Q7) Chapter 12 and 13	(Q6) Chapters 10 and 11
8 (02/28/2011)	Chapters 14 and 15	(Q8) Chapters 14 and 15	(Q7) Chapter 12 and 13
9 (03/07/2011)	-----	<b>SPRING BREAK</b>	-----
10 (03/14/2011)	Chapters 16 and 17	(Q9) Chapters 16 and 17	(Q8) Chapters 14 and 15
11 (03/21/2011)	Chapters 18 and 19	(Q10) Chapters 18 and 19	(Q9) Chapters 16 and 17
12 (03/28/2011)	Chapters 22 and 23	(Q11) Chapters 22 and 23	(Q10) Chapters 18 and 19
13 (04/04/2011)	Chapters 24 and 25	(Q12) Chapters 24 and 25	(Q11) Chapters 22 and 23
14 (04/11/2011)	Chapters 27 and 28	(Q13) Chapters 27 and 28	(Q12) Chapters 24 and 25
15 (04/18/2011)	Chapters 29 and 30	(Q14) Chapters 29 and 30	(Q13) Chapters 27 and 28
16 (04/25/2011)	Chapters 31 and 32	(Q15) Chapters 31 and 32**	(Q14) Chapters 29 and 30

\*See guidelines for making-up missed work.

\*\*A make-up will not be available for quiz 15.

WLB/s  
 December 2010