

Course Syllabus

Department : Biology
Course Title : Biol. 1408 Non-Majors
Section Name : WB, WB9
Start Date : 01/18/2011
End Date : 05/07/2011
Modality : ONLINE
Credits : 4

Instructor Information

Name : Steven Sofge
OC Email : ssofge@odessa.edu
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Course Description

BIOL 1408 Introduction to Biology I(26.0101.5103) (3-3)
4 hours

This course is a survey of biology including molecular and cellular biology, genetics, DNA, evolution and ecology. The cellular and molecular basis of life will be emphasized. Current topics in biology and medicine will be discussed. Designed as a transferable lab science course for non-science majors. Lab fee required. (SCANS 3, 6, 9) Prerequisite: None.

Prerequisites/Corequisites

Prerequisite: None

[Scans](#)

Course Objectives

1. Learner will be able to identify the significant concepts of the atom and how it forms bonds with other atoms to form molecules.
2. Learner will be able to explain the difference between inorganic molecules and organic molecules and recognize the various forms of each and the significance of these forms as they relate to living organisms.
3. Learner will be able to identify the 4 macromolecular molecules found common to living organisms and their units of structure as well as their functions important for life.
4. Learner will be able to understand the cell in terms of its anatomical structure and the functions of each structure and understand the processes by which substances move into and out of the cell.
5. Learner will be able to explain energy production and utilization by the different forms of cells which are common to our planet.
6. Learner will be able to understand the heredity of life and the alterations which occur in its structure and the consequences of these alterations.
7. Learner will be able to recognize the importance of evolution to the continuity of living forms and the various forms of support for evolution.
8. Learner will be able to understand the various concepts of ecology required to have a rudimentary grasp of its aspects.

Directions for Biol. 1408 Web

1. Go to www.odessa.edu and enter blackboard and click on Biol. 1408 for non-majors internet. Read the announcement page and OC student email daily for any new information.

2. Print a copy of these directions to refer to as you go through this course.

3. Click on "Course Compass" to enter the course. Follow the student registration instructions. This is where you will enter your access code found in a packet shrink-wrapped with your book. Your course id # is "sofge15153"

4. All Chapters have tests. To take any exams or quizzes or discussion questions, go into "Course Compass" and click on "Assignments". All Chapter Tests will be open until midnight on the due date.

5. All Units, Unit Cumulative Exams and Unit Discussion Questions need to be taken by midnight of their due date. These cover 2-4 Chapters per unit. Unit Cumulative Exams and Unit Discussion Questions will appear on the "Course Compass" "Assignment" page, and will be inaccessible at midnight of the due date. Unit Discussion Questions will only be 2-3 questions which will be pulled directly from the sections titled "Apply Your Knowledge" found at the end of the chapters.

6. FOR EACH CHAPTER, COMPLETE THE FOLLOWING BY MIDNIGHT OF THEIR DUE DATE:

A. Read the chapter and watch the power point lectures.

B. Watch the web animations for this chapter and take the quiz over these animations.

C. Take the Chapter Test

7. Point values for each quiz/exam follows:

***Animation Quizzes: 10 pts.**

***Discovery Video Quizzes: 25 pts.**

***BioFlix Quizzes: 10 pts. (these are found within the chapters in course compass)**

***Lab Quizzes: 20 pts.**

***Chapter Tests: 50 pts.**

***Unit Cumulative Exams: 100 pts.**

***Unit Discussion Questions: 25 pts. per chapter**

***Final Exam: 200 pts. (2 hrs.)**

8. IN ADDITION TO WHAT IS DONE FOR EACH CHAPTER, THE FOLLOWING INFORMATION IS SPECIFIC FOR EACH CHAPTER:

Unit I (Ch 1, 2, 3) (**Due Sun., Feb. 13**)

Ch. 1:

Watch the Discovery Video: "Early Life" and take the quiz.

Do the lab: "Orientation to the Laboratory and Scientific Principles" and do the post assessment quiz.

Ch. 2:

Do the lab: "Microcopy and Cell Structure" and do the post assessment quiz.

There is no animations quiz for this chapter.

Ch. 3: There are no special assignments for this chapter.

Take the Unit I Cumulative Exam and Answer the Unit I Discussion Questions.

Unit II (Ch. 4, 5, 6) (**Due Sun., Feb. 27**)

Ch. 4:

Watch the Discovery Video: "Cells" and take quiz.

Watch these bioflix videos and complete the quizzes. **Bioflix videos can be found in course compass under "Chapter Contents".**

"Tour of an Animal Cell"

"Tour of a Plant Cell"

Ch. 5:

Do the lab: "Diffusion and Osmosis" and do the quiz.

Ch. 6:

Do the lab: "Enzymes" and take quiz.

Take the Unit II Cumulative Exam and Answer the Unit II Discussion Questions.

Unit III (Ch. 7, 8) **(Due Sun., March 13)**

Ch. 7:

Watch the Discovery Video: "Nutrition" and take quiz.

Do the lab: "Deriving E From Food" and take quiz.

Omit Ch 7 animations quiz. The video is missing from the chapter contents.

Ch. 8:

Watch the bioflix: "Photosynthesis" and take quiz.

Do the lab: "Photosynthesis" and take quiz.

Take the Unit III Cumulative Exam and Answer the Unit III Discussion Questions.

Unit IV (Ch. 9, 10, 13, 14) **(Due Sun., Apr. 3)**

Ch. 9:

Watch the bioflix "Mitosis" and take quiz.

Ch. 10:

Watch the bioflix "Meiosis" and take quiz.

Do the animations quiz: "Sex and Reproduction"

Ch. 13:

Watch the Discovery Video: "DNA Forensics" and take quiz.

There will not be a chapter exam for this chapter.

Ch. 14:

Watch the bioflix "Protein Synthesis" and take quiz.

Do the lab: "Translation Lab" , only do assignment #1, and take quiz.

There will not be a Ch. 14 test.

Take the Unit IV Cumulative Exam and Answer the Unit IV Discussion Questions.

Unit V (Ch. 11, 12, 15) **(Due Sun., Apr. 17)**

Ch. 11: There are no special assignments for this chapter.

Ch. 12:

Watch the Discovery Videos: a) "Colored Cotton" and take quiz.

b) "Novelty Genes" and take quiz

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Ch. 15:

Watch the Discovery Videos: a) "Cloning" and take quiz.

b) "Trans Genes" and take quiz.

Take the Unit V Cumulative Exam and Answer the Unit V Discussion Questions.

Unit VI (Ch. 33, 34, 35) **(Due Sun., May 8)**

Ch. 33:

There are no special assignments for this chapter.

Ch. 34:

Omit: Ch. 34 Animations Quiz.

Do the lab: "Foraging Strategy" and quiz.

There will not be a Ch. 34 Exam.

Ch. 35:

Watch the Discovery Video: "Rain Forests" and take quiz.

There is no animation quiz for this chapter.

There will be no Unit VI Cumulative Exam nor do you need to answer the Unit VI Discussion Questions. This information will be covered on the Final Exam.

Final Exam opens 9am Mon., May 9 and closes Wed., May 11 at midnight.

Required Readings/Materials

You must purchase the following **required** readings/materials:

Biology: A Guide to the Natural World, 5th ed. by David Krogh, Pearson Publishing Co.

Course Requirements (Lectures, Assignments and Assessments)

Item (Name)	Type	Description	Due
Unit I	On-Line Lecture/Lab	Ch. 1,2,3	Feb. 13
Unit II	On-Line Lecture/Lab	Ch. 4,5,6	Feb. 27
Unit III	On-Line Lecture/Lab	Ch. 7,8	Mar. 13
Unit IV	On-Line Lecture/Lab	Ch. 9,10,13,14	Apr. 3
Unit V	On-Line Lecture/Lab	Ch. 11,12,15	Apr. 17
Unit VI	On-Line Lecture/Lab	Ch. 33,34,35	May 8
Final Exam	Comprehensive Exam	Exam	May 9-11

GRADING POLICY:

90-100 A

80-89 B

70-79 C

60-69 D

0-59 F

Special Needs:

Odessa College complies with Section 504 of the Vocational Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990. If you have any special needs or issues pertaining to your access to and participation in this or any other class at Odessa College, please feel free to contact me to discuss your concerns. You may also call the Office of Disability services at 432-335-6861 to request assistance and accommodations.

Learning Resource Center (Library)

The Library, known as the Learning Resources Center, provides research assistance via the LRC's catalog (print books, videos, e-books) and databases (journal and magazine articles). Research guides covering specific subject areas, tutorials, and the "Ask a Librarian " service provide additional help.

Student E-mail

Please access your Odessa College Student E-mail, by following the link to either set up or update your account: <http://www.odessa.edu/gmail/>. All assignments or correspondence will be submitted using your Odessa College email.

Student Portal

Please access your Odessa College Student E-mail, by following the link to either set up or update your account: <http://www.odessa.edu/gmail/>. All assignments or correspondence will be submitted using your Odessa College email.

Technical Support For Blackboard username and password help and for help accessing your online course availability and student email account contact the Student Success Center at 432-335-6878 or online at https://www.odessa.edu/dept/ssc/helpdesk_form.htm.