

Course Information

Course Title:	General Biology I
Course Number:	BIO 1111/1117
Credit Hours:	4.0
Lab Hours:	2.0
Prerequisite(s):	DEV 0012 and DEV 0026 and DEV 0030
Course Description:	This course is designed as the first in a series of two general education science courses. Covers basic chemistry, cytology, cell energetics, cell reproduction, and biochemistry; cellular and molecular biology. Three lecture and two lab hours (BIO 1117) per week.
Required Text:	<i>Biology Concepts & Connections</i> , Campbell et al, 7th edition, Pearson/Benjamin Cummings; for text with access to website, must use ISBN 055893224X; for website access only use ISBN 0558698107
Optional Materials:	<i>A Photographic Atlas for the Biology Lab</i> , Van de Graaff & Crawley, 2007, 6th edition
Technical Requirements:	Latest Flash Player , Windows Media Player, if you are a Mac user click on the Flip4Mac WMV for the free download of WMV.

For additional information go to the Technical Help Page under **Resources** tab.

Faculty Information

Instructor:	
Department:	Biology and Biotechnology
Course Email:	"Please use ANGEL Email".
Emergency Email:	
Phone:	
Office Location:	
Office Hours (campus):	"By appointment"
Office Hours (online):	"By appointment"

Course Outcomes

General Education Outcomes:

- Organize idea in a logical and purposeful way, using effective verbal and nonverbal skills to explain those ideas in a variety of oral communication interactions.
- Compose and deliver messages appropriate to an intended audience.
- Paraphrase information and opposing points of view in conversation.
- Phrase questions in order to obtain information in a variety of interaction.
- Read and respond critically
- Raise relevant questions.
- Articulate ideas or problems.
- Organize observable data into useful formats.
- Use appropriate problem-solving methods.
- Exhibit openness to alternative ideas.
- Construct measures to evaluate appropriateness, truthfulness, usefulness or validity of an idea or argument.
- Demonstrate analysis of information to support chosen position with attention to consequences.
- Recognize logical fallacies.
- Integrate sources.

Course Outcomes:

- Students will demonstrate an awareness of both the power of the scientific process and its limitations and demonstrate an awareness of communication as an integral part of the scientific way of knowing, both between and among scientists, and between scientists and the rest of society.
- Students will identify and describe fundamental elements and molecules in context to biologically important structures, chemical reactions, and physiological processes.
- Students will describe and differentiate the structure and function of major components relating to prokaryotic and eukaryotic cells.
- Students will be able to explain basic cellular thermodynamics, fundamental enzyme kinetics, cell respiration, fermentation, and photosynthesis.
- Students will be able to explain and illustrate cell reproduction and eukaryotic cell cycle.

Lab Outcomes:

- Students will describe, explain and model the process of science in context with developing observation skills, formulating questions and hypotheses, and interpreting data.
- Students will identify and describe fundamental elements and molecules in context to biologically important structures, chemical reactions, and physiological processes.

- Students will describe and differentiate the structure and function of major components relating to prokaryotic and eukaryotic cells.
- Will be able to describe, explain, and model cell reproduction and eukaryotic cell cycle.

[Top of Page](#)

Course Requirements

To complete this course the student must:

- take all exams on or before the stated deadline dates on "**Calendar**" and "**When Assignments Are Due**" pages
- complete all course review and drill activities listed as "required" for a unit prior to taking the exam that covers the same course unit

Outline:

WEEK	TOPICS	Chapter
1	Biology: Exploring Life	Chapter 1
2	The Chemical Basis of Life	Chapter 2
3	The Chemical Basis of Life (continued)	Chapter 2
4	The Molecules of Cells	Chapter 3
5	The Molecules of Cells (continued)	Chapter 3
6	A Tour of the Cell	Chapter 4
7	The Working Cell	Chapter 5
8	How Cells Harvest Chemical Energy	Chapter 6
9	Mid Term	Chapters 1-6
10	Photosynthesis: Using Light to Make Food	Chapter 7
11	The Cellular Basis of Reproduction and Inheritance	Chapter 8
12	Patterns of Inheritance	Chapter 9
13	Molecular Biology of the Gene	Chapter 10
14	How Genes are Controlled	Chapter 11
15	DNA Technology and Genomics	Chapter 12
16	Final Assessment	Chapters 7-12

[Top of Page](#)

Grading Information

Grading Policy:

ASSIGNMENT	POINTS
2 Pre-Course Survey (3 points each extra credit)	06
12 Chapter Practice Quizzes (4 points each)	48
4 Discussion forums (8 points each)	32
14 Tests (drop two lowest grades) @ 60 points each	720
Total Points	800

GRADING SCALE POINTS

A	720-800
B	640-719
C	560-639
D	480-559
F	00 - 479

[Top of Page](#)

Course Policies

Attendance/Participation Policy:

Online courses are considered to begin on the first day of the semester. In order to show attendance/participation in this course, students are expected to login to the course every week and complete each week's activities by Friday, 1:00 pm ET.

Other Policies:

If you have any other course policies, state them here.

[Top of Page](#)

Testing Information

It is very important that every Distance Learning student plan for the testing required in each of his or her Distance Learning courses. How tests are given will vary by course and will vary depending on whether the student lives within a 60-mile radius from campus or beyond a 60-mile radius from campus.

Many courses do not require on-campus, or "proctored" testing, while others do. It is the responsibility of the student to make the appropriate arrangements for completing the testing as

required for each of his or her courses. Click each link below to obtain information about testing for Distance Learning courses.

[Distance Learning Testing Overview](#)

[Distance Learning Testing Within or Beyond a 60-Mile Radius](#)

[Testing Center Information](#)

[PDF file about Proctor Information](#)

[Top of Page](#)

Sinclair Policies

Sinclair Academic Policies:

Click the link below to view policies such as dropping a course, withdrawing from college, late registrations, change of schedule, administrative withdrawal, grades, student behavior guidelines, safety and security, academic and other counseling. Understanding these policies is the responsibility of every student.

[Important Sinclair Policies](#)

Sinclair Semester Dates:

Click the link below to view important semester dates such as registration deadlines, payment deadlines, start and end dates for the semester as well as the last day to withdraw with a refund and the last day that withdrawal is allowed.

[Sinclair Semester Dates](#)

Sinclair Honor Code and Academic Integrity Policy:

[Sinclair Honor Code and Academic Integrity Policy](#)

[Top of Page](#)