

Undergraduate Course Syllabus

BIO 101: Principles of Biology

Center: Online

Course Prerequisites

None

Course Description

Introductory level biology course that includes mammalian cell structure and function, cellular reproduction and physiology, and basic Mendelian genetics. Laboratory exercises (BIO-101L) to follow lecture topics.

Course Outcomes

- Describe the structure and function of cells, the basic processes of genetics, and the interactions between organisms and their environment
- · Research a particular biotechnology and construct a project that uses scientific information to explain it
- Analyze scientific articles and develop questions about them, leading to a greater understanding of the complex relationship between technology and society
- Reflect on ethical dimensions of current topics in biology and biotechnology and develop well-informed,
 scientifically literate opinions about their health and the environment

Required Materials

Using your learning resources is critical to your success in this course. Please purchase directly through SNHU's online bookstore, MBS Direct, rather than any other vendor. Purchasing directly from the bookstore ensures that you will obtain the correct materials and that the Help Desk, your advisor, and the instructor can provide you with support if you have problems.

Access code for MasteringBiology, which includes the following e-book:

Campbell Essential Biology

E. J. Simon, J. L. Dickey, and J. B. Reece

Pearson Custom

5th Edition

2013

ISBN: 978-1-323-81203-7

Optional Materials

Campbell Essential Biology (physical textbook)

E. J. Simon, J. L. Dickey, and J. B. Reece

ISBN: 978-0-134-01496-8

Instructor Availability and Response Time

Your class interaction with the instructor and your classmates will take place on a regular, ongoing basis. Your instructor will be actively engaged within the course throughout the week. You will normally communicate with your instructor in the weekly discussions or the General Questions discussion topic so that your questions and the instructor's answers benefit the entire class. You should feel free, however, to communicate with your instructor via SNHU email at any time, particularly when you want to discuss something of a personal or sensitive nature. Your instructor will generally provide a response within 24 hours.

Grade Distribution

Assignment Category	Number of	Point Value	Total Points
Assignment Category	Graded Items	per Item	Total Follits
Discussions	7	25	175
MasteringBiology Quizzes	8	40	320
Journals	2	35	70
Final Project			
Milestone One	1	45	45
Milestone Two	1	90	90
Final Project	1	300	300
		Total Course Points:	1,000

This course may also contain practice activities. The purpose of these non-graded activities is to assist you in mastering the learning outcomes in the graded activity items listed above.

University Grading System: Undergraduate

Grade	Numerical Equivalent	Points
А	93–100	4
A-	90–92	3.67
B+	87–89	3.33
В	83–86	3
B-	80–82	2.67
C+	77–79	2.33
С	73–76	2
C-	70–72	1.67
D+	67–69	1.33
D	60–66	1
F	0–59	0

Grade	Numerical Equivalent	Points
1	Incomplete	
IF	Incomplete/Failure *	
IP	In Progress (past end	
	of term)	
W	Withdrawn	

^{*} Please refer to the <u>policy page</u> for information on the incomplete grade process.

Grading Guides

Specific activity directions, grading guides, posting requirements, and additional deadlines can be found in the Assignment Guidelines and Rubrics section of the course.

Weekly Assignment Schedule

All reading and assignment information can be found within each module of the course. Assignments and discussion posts during the first week of each term are due by 11:59 p.m. Eastern Time. Assignments and discussion posts for the remainder of the term are due by 11:59 p.m. of the student's local time zone.

In addition to the textbook readings that are listed, there may be additional required resources within each module.

Module	Topics and Assignments
1	The Nature and Practice of Biological Science
	Campbell Essential Biology, Chapter 1
	1-1 Discussion: Getting Started
	1-2 Journal: Biology and You
	1-3 MasteringBiology Quiz #1
	1-4 Final Project Review
2	The Chemical Foundation of All Living Things
	Campbell Essential Biology, Chapters 2 and 3
	2-1 Discussion: Facts About Fad Diets
	2-2 Final Project Milestone One: Topic Selection and Resources
	2-3 MasteringBiology Quiz #2
3	An Introduction to Cell Biology
	Campbell Essential Biology, Chapters 4 and 5
	3-1 Discussion: Cells at Work
	3-2 MasteringBiology Quiz #3
4	Cellular Respiration and Photosynthesis
	Campbell Essential Biology, Chapters 6 and 7
	4-1 Discussion: Respiration and Photosynthesis Equal Life
	4-2 Journal: Biology at Its Best (or Worst)
	4-3 MasteringBiology Quiz #4

5	Genetics and Human Inheritance
	Campbell Essential Biology, Chapters 8 and 9
	5-1 Discussion: Distressed Genes
	5-2 Final Project Milestone Two: Literature Review and Presentation Outline
	5-3 MasteringBiology Quiz #5
6	DNA Structure and Function
	Campbell Essential Biology, Chapter 10
	6-1 Discussion: Viral Vengeance
	6-2 MasteringBiology Quiz #6
7	Gene Regulation
	Campbell Essential Biology, Chapter 11
	7-1 Discussion (Optional): What Causes Cancer?
	7-2 Final Project: Presentation
	7-3 MasteringBiology Quiz #7
8	DNA Technology
	Campbell Essential Biology, Chapter 12
	8-1 Discussion: Biology and You, Revisited
	8-2 MasteringBiology Quiz #8

Attendance Policy

Online students are required to submit a graded assignment/discussion during the first week of class. If a student does not submit a posting to the graded assignment/discussion during the first week of class, the student is automatically withdrawn from the course for non-participation. Review the <u>full attendance policy</u>.

Late Assignments Policy

Meeting assigned due dates is critical for demonstrating progress and ensuring appropriate time for instructor feedback on assignments. Students are expected to submit their assignments on or before the due date. Review the <u>full late assignment policy</u>.

SNHU College of Online and Continuing Education Student Handbook

Review the student handbook.

ADA/504 Compliance Statement

Southern New Hampshire University is dedicated to providing equal access to individuals with disabilities, including intellectual disabilities, in accordance with Section 504 of the Rehabilitation Act of 1973, Title III of the Americans with Disabilities Act (ADA) of 1990, and the ADA Amendments Act of 2008. The university prohibits unlawful discrimination on the basis of disability and takes action to prevent such discrimination by providing reasonable accommodations to eligible individuals with disabilities.

As soon as you become aware of a disability, we encourage you to contact the Online Accessibility Center (OAC) to discuss accommodations for which you may be qualified. Reasonable accommodations are established through an interactive process between the student and the OAC. Note that accommodations are not retroactive and that disability accommodations are not provided until an accommodation letter has been processed.

Contact Information:

Online Accessibility Center

Phone: 866-305-9430 Email: oac@snhu.edu

For questions concerning support services, documentation guidelines, or general disability issues, visit the <u>Online</u> Accessibility Center website.

If you feel you have been denied appropriate disability-related accommodations, including appropriate auxiliary aids and services, you may file a grievance as described in the ADA/504 Grievance Policy found on the <u>Disability Services</u> webpage.

Academic Honesty Policy

Southern New Hampshire University requires all students to adhere to high standards of integrity in their academic work. Activities such as plagiarism and cheating are not condoned by the university. Review the <u>full academic honesty policy</u>.

Copyright Policy

Southern New Hampshire University abides by the provisions of United States Copyright Act (Title 17 of the United States Code). Any person who infringes the copyright law is liable. Review the full copyright policy.

SNHU College of Online and Continuing Education Withdrawal Policy

Review the full withdrawal policy.

Southern New Hampshire University Policies

More information about SNHU policies can be found on the policy page.

Student Work Samples

For the purpose of continuous improvement of our educational training, Southern New Hampshire University's College of Online and Continuing Education may, on occasion, utilize anonymous student work samples for internal professional development and staff training. If you have any questions or concerns, contact your advisor. If you would like to withdraw permission for use of your work, please email assessmentcalibration@snhu.edu.