

Undergraduate Course Syllabus

BIO 101L: Principles of Biology Lab

Center: Online

Course Prerequisites

None

Course Description

BIO 101L is a laboratory course, following topics in BIO 101, Principles of Biology. Students will gain hands-on experience and visual reinforcement of concepts, including acid-base dynamics, enzyme action, osmosis and diffusion, cellular reproduction, and use of microscopes.

Course Outcomes

- Perform experiments, upkeep, and safe handling of organisms and chemicals in the lab
- Model safe laboratory practices, including personal safety and equipment storage
- Explain complex processes in biology, including acid-base dynamics, enzyme action, cell reproduction, and the scientific method, and work with metrics and scientific measurements
- · Utilize the scientific method through hands-on activities in the lab

Required Materials

- SNHU Custom Biology Lab Kit (from eScienceLabs)
 - The fee for this lab is \$128.99, which was automatically added to your tuition upon registration for this course. Your kit will be automatically shipped to you when registration closes for the course, one month prior to term start. You will receive an email from eScienceLabs with UPS shipping and tracking information once the kit is shipped. Please track your package and confirm its arrival with your instructor. You will not need to purchase any materials through MBS for this course.
 - The kit you receive will contain a code taped to the underside of the lid. This code will grant you access to the online student portal, which you can use to supplement your assignments in this course. Registration instructions are included in the Course Information section of your Blackboard course.

For the final lab assignment: http://learn.genetics.utah.edu/content/labs/ (free resource)

Instructor Availability and Response Time

Your class interaction with the instructor and your classmates will take place in Blackboard 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 forum in Blackboard 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 Graded Items	Point Value per Item	Total Points
Discussions	1	20	20
Lab Assignments	7	100	700
Quizzes	8	20	160
Final Lab Assignment	1	140	140
		Total Course Points:	1,020

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

	7	Total Points:	1,020	
<u>Grade</u>	Numerical Equivalent	Points	Points Equivalent	
			Lower	Upper
А	93-100	4	949	1020
A-	90-92	3.67	918	948
B+	87-89	3.33	887	917
В	83-86	3	847	886
B-	80-82	2.67	816	846
C+	77-79	2.33	785	815
С	73-76	2	745	784
C-	70-72	1.67	714	744
D+	67-69	1.33	683	713
D	60-66	1	612	682
F	0-59	0	0	611
I	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 Course Information area in the Assignment Guidelines and Rubrics folder.

Weekly Assignment Schedule

The Learning Modules area in Blackboard contains one module folder for each week of the course. All reading and assignment information can be found in the folders. Assignments and discussion board 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 in Blackboard.

Module	Topics and Assignments
1	Scientific Research and the Scientific Method
	Lab Manual: Introduction to Science
	Lab Manual: General Lab Safety
	1-1 Discussion: Getting Started
	1-2 Module One Lab
	1-3 Module One Quiz
	1-4 Discussion (Non-Graded)
2	Chemistry and Biology
	Lab Manual: The Chemistry of Life
	2-1 Module Two Lab
	2-2 Module Two Quiz
	2-3 Discussion (Non-Graded)
3	Cell Biology
	Lab Manual: Diffusion and Osmosis
	3-1 Module Three Lab
	3-2 Module Three Quiz
	3-3 Discussion (Non-Graded)
4	Metabolism
	Lab Manual: Metabolism
	4-1 Module Four Lab
	4-2 Module Four Quiz
	4-3 Discussion (Non-Graded)
5	Photosynthesis
	Lab Manual: Plant Pigments and Photosynthesis
	5-1 Module Five Lab
	5-2 Module Five Quiz
	5-3 Discussion (Non-Graded)
6	Mitosis and Meiosis
	Lab Manual: Mitosis and Meiosis
	6-1 Module Six Lab
	6-2 Module Six Quiz
	6-3 Discussion (Non-Graded)

7	Genetics
	Lab Manual: Mendelian Genetics
	7-1 Module Seven Lab
	7-2 Module Seven Quiz
	7-3 Discussion (Non-Graded)
8	Biotechnology
	Lab Manual: Biomolecular Techniques (read only)
	8-1 Final Lab Assignment
	8-2 Module Eight Quiz
	8-3 Discussion (Non-Graded)

Attendance Policy

Online students are required to submit a graded assignment/discussion to Blackboard 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 full attendance policy.

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.

Diversity and Disability Statement

The College of Online and Continuing Education (COCE) at SNHU values diversity and inclusion. SNHU strives to create inclusive and welcoming academic environments. If there are aspects of the instruction or design of this course that present barriers to your inclusion, please notify the Disability Resource Center (DRC) as soon as possible. We will work with you and your instructor to address needs and concerns. We encourage all students with known or suspected physical, medical, sensory, psychiatric, and/or learning disabilities to register with the Disability Resource Center (DRC) in order to assess learning needs and take advantage of available academic accommodations and support services.

SNHU does not discriminate on the basis of race, color, national origin, sex, disability, age, religion, citizenship, marital status, gender identity or expression, sexual orientation, veteran/military status, or genetic information in its programs and activities. Requests for disabilities accommodations within COCE should be directed to:

Disability Resource Center (DRC) (866) 305-9430 (877) 520-8916 (fax) drc@snhu.edu

We welcome COCE students, faculty, and staff to consult with the Disability Resource Center (DRC) on disability-related questions or concerns. We look forward to hearing from you.

Complaints regarding discrimination and accommodations should be directed to:

(603) 645-9664 (603) 645-9717 (fax) adacompliance@snhu.edu

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 <u>full copyright policy</u>.

SNHU College of Online and Continuing Education Withdrawal Policy

Review the <u>full withdrawal policy</u>.

Southern New Hampshire University Policies

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

Assessment Calibration and 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 contact the assessment calibration administrator at assessmentcalibration@snhu.edu. See this document for more information.