



# Syllabus for Biology 1 for Health Studies

Credits: 4 BIOL 1121

#### **Instructor Contact Information:**

You can also always send your instructor a private message through the Moodle Messaging system. Once logged into your course, click your instructor's Moodle profile page to be provided the ways in which to communicate with your instructor. Your instructor's email will also be listed in their profile.

## **Course Description**

This course is the first in a series of two biology courses designed for students to develop foundational knowledge they will build on throughout the Health Science program. In Biology 1, students are introduced to biochemistry, cell biology, and genetics to understand how living organisms function at the cellular level and to prepare students to study biology at the organism, population, and ecosystem level. This course includes a classroom component as well as a virtual lab component.

## **Learning Objectives**

#### Program Learning Outcomes (PLOs):

- PLO1: Students will be able to explain the social and biological causes of health and illness.
- PLO9: Students will be able to communicate using well-organized arguments and credible supporting evidence.

#### Course Learning Outcomes (CLOs):

- CLO1: Classify the structure and properties of biological molecules in order to better understand biological determinants of health.
- CLO2: Explain cell organization and functions in order to better understand biological determinants of health.
- CLO3: Explain how genetic information is encoded in DNA and transmitted in order to better understand biological determinants of health.

## Co/Prerequisites

None.

#### **Course Materials**

UoPeople courses use open educational resources (OER) and other materials specifically donated to the University with free permissions for educational use. Therefore, students are not required to purchase any textbooks or sign up for any websites that have a cost associated with them. The main required textbook for this course is listed below and can be readily accessed using the provided links. There may be additional required/recommended readings, supplemental materials, or other resources and websites





necessary for lessons; these will be provided in the course's General Information and Forums area, and throughout the term via the weekly course Unit areas and the Learning Guides.

 Clark, M. A., Douglas, M., & Choi, J. (2025). Biology 2e. Licensed under CC BY 4.0. https://openstax.org/details/books/biology-2e

## **Technology Requirements**

Students are required to have access to a computer with a reliable Internet connection in order to complete all requirements for a course. Students must also have the ability to save documents and files. Typically, University of the People learning materials are provided to students in either Adobe PDF or Microsoft Office compatible formats. Therefore, students need to be able to open and save documents in these formats as well.

Students will also engage in virtual lab activities. Some simulations run in HTML5, which requires a browser that supports HTML5 (such as the latest versions of Chrome, Firefox, Safari, or Edge). Certain activities require the installation of NetLogo, a programmable modeling environment.

Detailed system requirements for each type of simulation and activity are provided in the Virtual Lab Technical Guide within the respective unit.

Campus Tech Support Email for English programs: support@uopeople.edu

## Regular and Substantive Interaction

As your instructor, they will interact and engage with each of you on a regular basis throughout the term to support your learning. They will provide direct instruction related to the course's learning objectives, respond to your questions, grade and/or provide feedback on your submitted coursework, post regular announcements, and engage in the course discussion areas regarding academic course content when appropriate.

# Course Expectations and Learning Activities

#### **Discussions**

Some units in this course require that you complete a Discussion Assignment. You are required to develop and post a substantive response to the Discussion Assignment in the Discussion Forum. A substantive response is one that fully answers the question that has been posted by the instructor. In addition, you must extend the discussion by responding to at least two (2) of your peers' postings in the Discussion Forum. All your discussion posts will be assessed by your instructor. Instructions for proper posting and rating (out of a 10-point scale) are provided in the Discussion Forum for each week. Review the rubrics before you start working on the discussion forums. Discussion Forums are only active for each current and relevant learning week, so it is not possible to contribute to the forum once the learning week has come to an end. Failure to participate in the Discussion Assignment by posting in the Discussion Forum and responding to peers as required may result in failure of the course.

#### **Assignment Activities**

Assignment Activity is graded by your instructor. The grading rubric is listed under the assignment instructions. The grading rubric is a document that outlines the criteria that your instructor will use to grade your work.





#### Virtual Lab Activities

In this course, certain units will involve completing Virtual Lab Assignments. These assignments provide the opportunity to conduct laboratory experiments or simulations through an online digital platform. The Virtual Laboratory Activities encompass these virtual labs, acting as a virtual lab manual complete with an observation schedule for you to record your findings. You will also complete a lab report where you present the results of multiple lab activities. Read through all units carefully to determine when your lab report is due for your virtual lab activities. Please be aware that your instructor will evaluate this activity based on the rubrics provided in the assignment instructions.

#### **Class Introductions**

This section is your opportunity to introduce yourself to your classmates and create a vibrant learning community. By sharing your background, interests, and goals, you can create meaningful connections and discover commonalities with your peers.

#### **Ouizzes**

This course will contain three types of quizzes – the Self-Quiz, the Graded Quiz, and the Review Quiz. These quizzes may contain multiple choice, true/false, or short answer questions. The results of the Self-Quiz will not count towards your final grade. However, it is highly recommended that you complete the Self-Quiz to ensure that you have adequately understood the course materials. Along with the Reading Assignments, the results of the Self-Quiz should be used as part of an iterative learning process, to thoroughly cover and test your understanding of course material. You should use the results of your Self-Quiz as a guide to go back and review relevant sections of the Reading Assignments. Likewise, the Review Quiz will not count towards your final grade, but should also be used to assist you in a comprehensive review and full understanding of all course material, in preparation for your Final Exam. Lastly, the results of the Graded Quiz will count towards your final grade.

#### **Final Exam**

The Final Exam will be available for students to complete between Thursday and Sunday of Week/Unit 9, following the completion of eight units of work. The format of the Final Exam is similar to that of the quizzes and may contain a combination of different question types. You will have one attempt to take the exam, and it will be graded electronically. Specific instructions on how to prepare for and take the Final Exam will be provided during Week 8 (located inside the Unit 9 Learning Guide). Final Exams must be taken without the use of course learning materials (both those inside and outside the course). If particular materials are allowed for use during the exam, these will be noted in the exam's instructions.

#### **Course Forum**

The Course Forum is the place to raise issues and questions relating to the course. It is regularly monitored by the instructors and is a good place to meet fellow students taking the same course. While it is not required to participate in the Course Forum, it is highly recommended.

## Participation Expectations

- Be involved and active in your courses.
- Be highly motivated and disciplined.
- Check the course homepage, calendar and assignment page, the course syllabus, your UoPeople email, and the Moodle course discussion forums several times a week.
- Post the required comments and responses to the discussion forum for your course.
- Keep up with your assignments and online quizzes/exams (as applicable) and manage your time well. These quizzes test your knowledge and comprehension of the new content.





- Participate actively in class discussions.
- Be polite and respectful.
- Use good grammar and correct spelling.
- Be honest and original. Plagiarism will not be tolerated in any online course.

Non-participation is characterized by lack of any assignment submissions, inadequate contributions to the Discussion Forums, and/or lack of peer feedback to Discussion/Written Assignments. Also, please note the following important points about course participation:

- Assignments must be submitted on or before the specified deadline. A course timeline is provided in the course schedule, and the instructor will specify deadlines for each assignment.
- Occasionally there may be a legitimate reason for submitting an assignment late. Most of the time, late assignments will not be accepted and there will be no make-up assignments.
- All students are obligated to inform their instructor in advance of any known absences which may result in their non-participation.

## Feedback and Suggestions

We value your input and would encourage you to complete the end of course survey to provide us with course feedback and suggestions, and report issues

## **Evaluation and Grading Scale**

## **Grading Weights:**

Category	% Of Grade	Grade Items (Learning Activities)	Associated Learning Objectives/Outcomes
Discussion Forums		<ol> <li>Discussion Forum – Unit 1</li> <li>Discussion Forum – Unit 3</li> <li>Discussion Forum – Unit 6</li> </ol>	<ul><li>CLO1</li><li>CLO2</li><li>CLO2, CLO3</li></ul>
Assignment Activities		Assignment Activity – Unit 2     Assignment Activity – Unit 4     Assignment Activity – Unit 5     Assignment Activity – Unit 7	<ul><li>CLO1</li><li>CLO1, CLO2</li><li>CLO1, CLO2</li><li>CLO3</li></ul>
Virtual Lab	15%	<ol> <li>Virtual Lab Assignment – Unit 1</li> <li>Virtual Lab Assignment – Unit 6</li> <li>Virtual Lab Assignment – Unit 8</li> </ol>	• CLO1 • CLO2 • CLO3
Graded Quizzes	1070	Graded Quizzes – Unit 3     Graded Quizzes – Unit 6	<ul><li>CLO1, CLO2</li><li>CLO1, CLO2, CLO3</li></ul>
Final	5%	1. Final Exam – Unit 9	• CLO1, CLO2, CLO3
TOTAL	100%		





## **Grading Scale:**

Letter Grade	% Grade	<b>Grade Points</b>
A+	98%-100%	4.00
А	93-97%	4.00
A-	90%-92%	3.67
B+	88%-89%	3.33
В	83%-87%	3.00
B-	80%-82%	2.67
C+	78%-79%	2.33
С	73%-77%	2.00
C-	70%-72%	1.67
D+	68-69%	1.33
D	63%-67%	1.00
D-	60%-62%	0.67
F	<60	0.00
W	N/A	N/A

Students may also be granted Withdrawal (W), if they withdraw from the course, or an Incomplete (I) should their circumstances permit. A student who feels they were graded unfairly, or who seeks to dispute a grade, may initiate a grade appeal process. Refer to <u>University Policies</u> for more information on withdrawals and appeals.

#### Course Schedule

### **UNIT 1: Introduction to Central Themes in Biology**

- Watch/Read the reading assignments due by Saturday or Sunday.
- Discussion first response due by Sunday.
- Discussion replies due by Wednesday.
- Virtual Lab Activity completion.
- Submission of the Virtual Lab Assignment due by Wednesday.
- Self-Quiz submission.

## **UNIT 2: Biological Macromolecules**

- Watch/Read the reading assignments due by Saturday or Sunday.
- Assignment Activity submission due by Wednesday.
- Self-Quiz submission.





#### **UNIT 3: Cell Structure and Membranes**

- Watch/Read the reading assignments due by Saturday or Sunday.
- Discussion first response due by Sunday.
- Discussion replies due by Wednesday.
- Virtual Lab Activity completion.
- Self-Quiz submission.
- Graded Quiz due by Wednesday.

#### **UNIT 4: Metabolism**

- Watch/Read the reading assignments due by Saturday or Sunday.
- Assignment Activity submission due by Wednesday.
- Virtual Lab Activity completion.
- Self-Quiz submission.

#### **UNIT 5: Cell Communication**

- Watch/Read the reading assignments due by Saturday or Sunday.
- Assignment Activity submission due by Wednesday.
- Virtual Lab Activity completion.
- Self-Quiz submission.

#### **UNIT 6: Cell Division**

- Watch/Read the reading assignments due by Saturday or Sunday.
- Discussion first response due by Sunday.
- Discussion replies due by Wednesday.
- Self-Quiz submission.
- Graded Quiz due by Wednesday.
- Submission of Virtual Lab Assignment due by Wednesday.

## **UNIT 7: Principles of Genetics**

- Watch/Read the reading assignments due by Saturday or Sunday.
- Assignment Activity submission due by Wednesday.
- Virtual Lab Activity completion.
- Self-Quiz submission.

#### **UNIT 8: Molecular Basis of Inheritance**

- Watch/Read the reading assignments due by Saturday or Sunday.
- Virtual Lab Activity completion.
- Submission of Virtual Lab Assignment due by Wednesday.
- Self-Quiz submission.





#### **UNIT 9: Final Exam**

Final Exam due by Sunday.

## **University Policies & Processes**

## Late Work/Make-up Policy

Please review the Late Work policy in the University Catalog.

#### **Code of Conduct**

University of the People expects that students conduct themselves in a respectful, collaborative, and honest manner at all times. Harassment, threatening behavior, or deliberate embarrassment of others will not be permitted. Any conduct that interferes with the quality of the educational experience is not allowed and may result in disciplinary action, such as course failure, probation, suspension, or dismissal. For more information on this topic, please review the <u>General Code of Conduct</u> in the University Catalog.

## **Procedures for Resolving Academic Grievances/Appeals**

If you believe that the final grade you received for a course is erroneous, unjust, or unfair, please contact your course instructor. This must be done within fourteen days of the last day of the term. For more information on this topic, please review the <u>Grievance Policy</u> and <u>Grade Appeals</u> Procedure in the University Catalog.

## Withdrawal and Drop Date Policy

Please review the Course Drops and Withdrawals policy of the University Catalog.

#### **Academic Integrity and Plagiarism**

Please review the Code of Academic Integrity in the University catalog.

### **Intellectual Property**

UoPeople respects the intellectual property rights of others who seek to create, preserve, and disseminate knowledge through teaching, collective learning, and continued research at the University at large. For more information on this topic, please review the <a href="Intellectual Property">Intellectual Property</a> policy in the University catalog.

#### **Reasonable Accommodations**

Contact your Program Advisor to open a request for support.

# Student Support Services & Resources

### **English Programs**

Academic Advising: <a href="mailto:advising@uopeople.edu">advising@uopeople.edu</a>
Financial Aid: <a href="mailto:financial.aid@uopeople.edu">financial.aid@uopeople.edu</a>
Library Resources: <a href="mailto:library@uopeople.edu">library@uopeople.edu</a>
Payment Processing: <a href="mailto:payments@uopeople.edu">payments@uopeople.edu</a>
Student Services: <a href="mailto:student.services@uopeople.edu">student.services@uopeople.edu</a>

Technical Support: <a href="mailto:support@uopeople.edu">support@uopeople.edu</a>