Hunter College

Principles of Biology I

Spring 2020 Lecture Syllabus

Lectures: Mondays & Thursdays 8:10-9:25 AM in 714 HW

Course Lecturer: Dr. S. Sheppard-Lahiji

Email: Sheppard@genectr.hunter.cuny.edu

Office Hours: TBD

Texts and course materials:

1. Campbell Biology 11th edition (Custom for Principles of Biology at Hunter College) Jane B. Reece. ISBN-10: 1323623450 (ISBN-13: 9781323623459)

Custom edition is loose-leaf, 3-hole punched and contains fewer chapters than non-custom text.

The standard (non-custom) Campbell textbook is also an acceptable edition.

2. Alaie and Jaeger Principles of Biology I Laboratory Manual (Spring 2020) ISBN: 978-1-5339-2300-4
   Lab manuals are available from Shakespeare Bookstore (939 Lexington Ave)

Check blackboard and your Hunter email regularly for course related material and messages

Classroom Expectations & Learning Outcomes

Meaningful and Constructive dialogue is encouraged in class and requires mutual respect, and willingness to learn. Disruptive behaviors, including excessive talking, arriving late to class and sleeping are discouraged.

As a result of this course experience, students should be able to

1. employ the scientific method to identify problems or questions, develop hypothesis, design experiments to test hypotheses, and reach conclusions

2. understand the interrelationships, hierarchies, and cooperation among various physiological systems

3. apply knowledge of molecular biology, DNA, and protein metabolism to the understanding of broad classes of pathologies

4. read relevant biological literature and write short responses about the experimental work, conclusions, and significance of the readings

5. become critically engaged with the material and be active participants in the classroom/community

Hunter College Academic Integrity Policy: Hunter College regards acts of academic dishonesty (e.g., plagiarism, cheating on examinations, obtaining unfair advantage, and falsification of records and official documents) as serious offenses against the values of intellectual honesty. The College is committed to enforcing the CUNY Policy on Academic Integrity and will pursue cases of academic dishonesty according to the Hunter College Academic Integrity Procedures.

In compliance with the American Disability Act of 1990 (ADA) and with Section 504 of the Rehabilitation Act of 1973, Hunter College is committed to ensuring educational parity and accommodations for all students with documented disabilities and/or medical conditions. It is recommended that all students with documented disabilities (Emotional, Medical, Physical and/ or Learning) consult the **Office of AccessABILITY** located in Room E1124 to secure necessary academic accommodations. For further information and assistance please call (212- 772- 4857)/TTY (212- 650- 3230).

Spring 2020
Lecture Schedule – Principles of Biology 1

	M	T	W	Th	F	Sa/Su
Jan	27 Carbon and the Molecular Diversity of Life (Ch. 4) The Structure and Function of Large Biological Molecules (Ch. 5)	28	29	30 The Structure and Function of Large Biological Molecules (Ch. 5)	31	1/2
Feb	3 The Structure and Function of Large Biological Molecules (Ch. 5)	4	5	6 Membrane Structure and Function (Ch. 7)	7	8/9
	10 Membrane Structure and Function (Ch. 7) (Dr. Alaie lecturing)	11	12	13 A Tour of the Cell (Ch. 6)	14	15/16
	17 College Closed	18	19	20 LECTURE EXAM I	21	22/23
	24 A Tour of the Cell (Ch. 6)	25	26	27 A Tour of the Cell (Ch. 6)	28	29/1
Mar	2 An Introduction to Metabolism (Ch. 8)	3	4	5 An Introduction to Metabolism (Ch. 8)	6	7/8
	9 Cellular Respiration & Fermentation (Ch. 9)	10	11	12 Cellular Respiration & Fermentation (Ch. 9)	13	14/15
	16 The Cell Cycle (Ch. 12)	17	18	19 The Cell Cycle (Ch. 12)	20	21/22
	23 Meiosis & Sexual Life Cycles (Ch. 13)	24	25	26 LECTURE EXAM II	27	28/29

Apr	30 Meiosis & Sexual Life Cycles (Ch. 13)	31	1	2 Mendel and the Gene Idea (Ch. 14)	3	4/5
	6 Mendel and the Gene Idea (Ch. 14)	7	8 Spring break begins	9	10	11/12
	13	14	15	16 Spring break ends	17	18/19
	20 The Chromosomal Basis of Inheritance (Ch. 15)	21	22	23 The Chromosomal Basis of Inheritance (Ch. 15)	24	25/26
May	27 The Chromosomal Basis of Inheritance (Ch. 15)	28	29	30 The Molecular Basis of Inheritance (Ch. 16)	1	2/3
	4 The Molecular Basis of Inheritance (Ch. 16)	5	6	7 Gene Expression: From Gene to Protein (Ch. 17)	8	9/10
	11 Gene Expression: From Gene to Protein (Ch. 17)	12	13	14 Short Response Exam	15	16/17
	18	19	20	21 FINAL EXAM 9-11AM	22	

NOTE: Lecture slides ARE NOT POSTED. Most slides have exact or comparable figures in the textbook, but you are expected to take notes on slides shown in lecture. In addition to using the textbook as the basis for lecture, Dr. Sheppard-Lahiji will discuss material outside of your text, including figures and graphs. Some supplemental information may be posted on blackboard.

There are NO MAKEUP EXAMS in BIOL 100.

Bio 100 Laboratory Calendar
Principles of Biology - Spring 2020

	Monday	Tuesday	Wednesday	Thursday	Friday
Jan	27 **No Labs** (Classes begin)	28 **No Labs**	29 **No Labs**	30 **No Labs**	31 **No Labs**
Feb	3 Cells	4 Cells	5 Cells	5 Cells	6 Cells
	10 Osmosis	11 Osmosis	12 **College Closed**	13 Osmosis	14 Osmosis
	17 **College Closed**	18 **No Labs**	19 Osmosis	20 **No Labs**	21 DNA Isolation
	24 DNA Isolation	25 DNA Isolation	26 DNA Isolation	27 DNA Isolation	28 **No labs**
Mar	2 Fingerprinting 1	3 Fingerprinting 1	4 Fingerprinting 1	5 Fingerprinting 1	6 Fingerprinting 1
	9 Fingerprinting 2	10 Fingerprinting 2	11 Fingerprinting 2	12 Fingerprinting 2	13 Fingerprinting 2
	16 **No labs**	17 Enzymes 1	18 Enzymes 1	19 Enzymes 1	20 Enzymes 1
	23 Enzymes 1	24 Enzymes 2	25 Enzymes 2	26 Enzymes 2	27 Enzymes 2
	30 Enzymes 2	31 *Lab exam*	1 *Lab exam*	2 *Lab exam*	3 *Lab exam*
Apr	6 *Lab exam*	7 **No Labs** (Wednesday schedule)	8 ***Spring Recess***	9 ***Spring Recess***	10 ***Spring Recess***
	13 ***Spring Recess***	14 ***Spring Recess***	15 ***Spring Recess***	16 ***Spring Recess***	17 Mitosis/ Meiosis
	20 Mitosis/ Meiosis	21 Mitosis/ Meiosis	22 Mitosis/ Meiosis	23 Mitosis/ Meiosis	24 pGLO 1
	27 pGLO 1	28 pGLO 1	29 pGLO 1	30 pGLO 1	1 pGLO 2
May	4 pGLO 2	5 pGLO 2	6 pGLO 2	7 pGLO 2	8 Bioinformatics
	11 Bioinformatics	12 Bioinformatics	13 Bioinformatics	14 Bioinformatics (last day of classes)	15 Reading Day
	18	19	20	21	22

No Lab = You have no Biology Lab; lectures and recitations will meet as scheduled.
No Classes Scheduled = No classes meet, the college is closed.

COURSE GRADE SUMMARY:

Lecture Exam 1	=	**15%** (10% MCQs, 5% short response) – 25 MCQs
Lecture Exam 2	=	**15%** (10% MCQs, 5% short response) – 25 MCQs
Lecture Exam 3	=	**20%** (50 MCQs)
Recitation Assignments	=	**10%** (assignments given during assigned recitation)
Short Response Exam	=	**10%** (cumulative short response)
Lab Assignments	=	**30%** (quizzes and lab exam)

100%

Extra Credit can be earned through assessments that will be announced via blackboard.

LECTURE: 70% pts

Lecture exams will consist of 25 multiple choice questions to assess critical thinking and conceptualization and a short response component to assess your ability to convey scientific concepts. The first 2 Lecture exams are 15% of you grade in the course: 10% for multiple-choice questions + 5% of very short responses. The (final) exam, held during finals week will be worth 20% points in total: 10% multiple choice questions from material not yet tested (material since the 2nd exam) and an additional 10% cumulative. The cumulative exams will consist of multiple-choice questions covering material from the 1st and 2nd lecture exams.

Please note that if the cumulative MCQ exam is higher than you lowest score MCQ score on Exam 1 or Exam 2, the cumulative exam score will replace the lowest score (and count double). For instance, if you score a 76 on exam #1, a 68 on exam #2, and you earn 82 points on the cumulative portion of the 3rd exam, the MCQ score from exam #2 will be replaced with the 82 score. Your exam grades would hen become 76,82, and 82, (+ you score from the non-cumulative portion of the 3rd exam which cannot be dropped).

Recitation Assignments: Recitation instructors will administer assessments during your recitations. The specific dates will be determined and announced on blackboard. Assignments **must** be taken in you assigned recitation.

Short response exam: Questions may cover any topics discussed over the course of the semester. Responses may require short sentences, graphs and/or figures. All questions will be mandatory

Gradescope: We will be using Gradescope this term, which allows course instructors the ability to provide fast and accurate feedback on your work. Certain exam grades will be returned through Gradescope and some assignments may require submission via Gradescope. As soon as grades are posted, you will be notified immediately so that you can log in and see your grade and feedback. You will be manually added to Gradescope and will not need a course code for access. Email notifications when gradescope scores become available are sent to your CUNY email address.

LAB: 30% pts

Students will complete lab related assignments and take a laboratory exam based on the exit questions within the lab manual.

ATTENDANCE:

Laboratory attendance is mandatory! If you miss lab, lab work must be made up with another instructor during the same week the lab exercise is offered.

Recitation attendance is mandatory! You are allowed to miss **two** non-assignment recitation during the semester without penalization. Our recitation instructors are excellent, and they are here to help you! Please bring your questions to them regarding lecture content. Recitation instructors hold regular office hours, where you can also find other students to study with. Office hours are determined by recitation instructors and they will provide you with their schedule. Studying in small groups of is immensely helpful as collaborative discussion often bring out more questions than independent work. There are no makeup recitation quizzes.

STUDYING: Principles of Biology is a ***reading-intensive*** course and each chapter typically requires multiple readings. It is important to stay on pace/ahead of the lecture syllabus in order to avoid falling behind. Students often need to spend more than the minimum amount of time on the material in order to master it. Methods of course preparation vary from student to student and you should familiarize yourself with all available forms of support offered by the course and Hunter College.

INCOMPLETES (grade of INC). Students must submit a request for a grade of INC for BIOL100 **before** the start of the Final Exam. An INC is assigned to a student ONLY IF the student presents documented medical evidence of an inability to take the final exam on schedule. **Makeup lab work is not available,** but a make up for the final lecture exam can be administered before the end of the Fall 2020 semester. An INC that is not resolved turns into a FIN at the end of the Fall 2020 term.

CREDIT/NO CREDIT. The Hunter College policy on CR/NCR can be found at http://www.hunter.cuny.edu/onestop/repository/files/registrar/creditnocredit_reg.pdf, along with the required request form. If you want to take BIOL 100 for CR/NCR, please complete and sign the form and then bring it to Dr. Sheppard-Lahiji before the start of the final exam. Please note that health science programs, including premed programs, do not accept Credit/No Credit grades. Only letter grades are acceptable for these programs. Each year we get requests from students who chose Cr/NCr to have their grade changed back to a letter grade because they decide to apply to a health-related program. The Cr/NCr form is a contract, and we are obliged to turn down such requests, so before requesting a Cr/NCr grade, please consider the consequences very seriously.