Lecture Syllabus for Principles of Biology I
Spring 2019

Lectures: Mondays & Thursdays 8:10am- 9:25am in 714 Hunter West.
Course Lecturer: S. Sheppard-Lahiji PhD
Office Hours: Refer to lecture calendar (also located on blackboard for days/times)
Email: Sheppard@genectr.hunter.cuny.edu (average response time: 24-48 hours on weekdays only)

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 looseleaf, 3-hole punched and contains fewer chapters than non-custom text.

2. Alaie and Jaeger (Spring 2019) Principles of Biology I Laboratory Manual. ISBN: 978-1-5339-1116-2

Texts and lab manuals are available from Shakespeare& Co.

Learning Outcomes & Classroom Expectations:
As a result of this course experience, students should be able to

1. employ the scientific method to identify problems or questions, develop hypotheses, 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 current biological literature and write short essays 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 2019 LECTURE CALENDAR

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

Apr	1 Mendel and the Gene Idea (Ch. 14)	2	3	4 LECTURE EXAM II	5	6/7
	8 Chromosomal Basis of Inheritance (Ch. 15)	9	10	11 Chromosomal Basis of Inheritance (Ch. 15)	12	13/14
	15 Molecular Basis of Inheritance (Ch. 16)	16	17	18 Molecular Basis of Inheritance (Ch. 16)	19	20/21
	22	**SPRING RECESS April 19th – April 28th**	24	25	26	27/28
May	29 From Gene To Protein (Ch. 17)	30	1	2 From Gene To Protein (Ch. 17)	3	4/5
	6 Regulation of Gene Expression (Ch. 18)	7	8	9 Regulation of Gene Expression (Ch. 18)	10	11/12
	13 The Evolution of Populations (Ch. 23) *Last day of lecture*	14	15	16	17	18/19
	20	21	22	23 FINAL EXAM 9-11AM	24	25/26

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 outside material, including figures and graphs, during lecture that you will be responsible for. Audio recordings are not allowed without consent.

There are NO MAKEUP EXAMS in BIOL 100.

LECTURE: **700 pts**

There will be **two** Midterm lecture exams worth 175 pts each: 100 pts for multiple-choice questions + 75 pts for short response questions. The final exam (held during finals week) will be worth **300** points in total: 200 points of multiple choice questions from material not yet tested (material since Midterm II) and an additional 100 point cumulative exam. This cumulative exam will consist of multiple choice questions **covering material from the Midterms I and II.**

Please note that if your 100 pt cumulative exam score is higher than Midterm I or Midterm II, the cumulative exam score will replace the lowest of those scores (and count double). For instance, if you score a 76 on exam #1, a 68 exam #2, and you earn 82 points on the **cumulative** portion of the final exam, we will drop your score from exam #2 and count your 82 score twice. Your scores would become 76, 82, 82, (plus your score from the non-cumulative portion of the 3rd exam which cannot be dropped).

Note: short answer responses cannot be replaced by your cumulative multiple choice score

LAB: **300 pts**

Students will take weekly quizzes, a laboratory exam based on the exit questions within the lab manual, and write a laboratory report. Lab instructors will provide you with additional information.

COURSE GRADE SUMMARY:

Midterm I	=	175 pts (100 pts MCQ and 75 pts short response questions)
Midterm II	=	175 pts (100 pts MCQ and 75 pts short response questions)
Final Exam	=	300 pts (200 pts MCQ new material 100 pts cumulative)
In class assignments	=	50 pts (will be administered through blackboard)
Lab quizzes	=	100 pts
Lab Report (completed in lab)	=	100 pts
Exit Questions Exam	=	100 pts

1000 pts

Extra credit: 50 pts can be earned throughout the semester

ABSENCES:

Laboratory attendance is mandatory! You are allowed to miss **one** lab period during the semester. If you miss the first laboratory, you may not miss another lab period. After one absence in lab, you must make up the lab work with another instructor during the same week the lab exercise is offered (see the front of your lab manual for the schedule). If you make up a lab, be sure to get a note from that instructor to verify for your own instructor that you made up the lab. If you do not make up missed labs after your first allowed absence, your total lab score is reduced by 10% for *each* missed lab.

Recitation attendance is mandatory! You are allowed to miss **two** recitations during the semester. Our recitation instructors are excellent and they are here to help you! Please bring your questions to them during your assigned recitation. Recitation instructors hold regular office hours, where you can also find other students to study with. Studying in small groups of 3 or 5 is immensely helpful since different people emphasize different material for each reading, and multiple minds are often better than one mind. Missing more than two sessions could result in point deductions.

STUDYING: Principles of Biology is a ***reading-intensive*** course!! Please read the assigned chapters and work through the Scientific Skills Exercises. Each chapter typically requires multiple readings. Read all assignments each week, since it is extremely difficult to catch up with reading this demanding. Students often need to spend more than the minimum amount of time on the material in order to master it. It can be helpful to keep a notebook for vocabulary words and questions as well as for lecture notes.

INCOMPLETES (grade of INC). Students must ***request*** a grade of INC for BIOL 100 **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 makeup final exam will be administered the following semester. An INC turns into a FIN if a makeup exam is not completed by the end of the Fall 2019 semester.

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 or Dr. Lahiji **before** the start of the final lecture 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.