

Lecture Syllabus for Principles of Biology II

FALL 2019

Lectures: Tuesdays & Thursdays 5:35- 6:50pm. In 118N (Assembly Hall).

Course Lecturers: Dr. Derrick Brazill & Dr. Adrienne Alaie

Office Hours: Dr. Brazill: Mondays 1-3 pm (803A) / Dr. Alaie: Thursdays 3-5pm 838N.

Emails: Brazill@genectr.hunter.cuny.edu & Alaie@genectr.hunter.cuny.edu

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 (Fall 2019) Principles of Biology II Laboratory Manual.
ISBN: 978-1-5339-1461-3

Lab manuals are available from Shakespeare Bookstore (939 Lexington Ave)

Course documents: available on Blackboard

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).

Principles of Biology II - Fall 2019

Month	Monday	Tuesday	Wednesday	Thursday	Friday
August	26	27 <i>No Lab</i>	28 <i>No Lab</i>	29 Photosynthesis	30 Photosynthesis
September	2 <i>No Classes Scheduled</i>	3 Photosynthesis	4 Photosynthesis	5 Photosynthesis <i>Monday Schedule</i>	6 <i>No Lab</i>
September	9 Plants 1	10 Plants 1	11 Plants 1	12 Plants 1	13 Plants 1
September	16 Plants 2	17 Plants 2	18 Plants 2	19 Plants 2	20 Plants 2
September	23 Practical #1	24 Practical #1	25 Practical #1	26 Practical #1	27 Practical #1
September/ October	30 <i>No Classes Scheduled</i>	1 <i>No Classes Scheduled</i>	2 Invertebrates	3 Invertebrates	4 Invertebrates
October	7 <i>No Lab</i>	8 <i>No Classes Scheduled</i>	9 <i>No Classes Scheduled</i>	10 <i>No Lab</i>	11 <i>No Lab</i>
October	14 <i>No Classes Scheduled</i>	15 Invertebrates	16 Invertebrates <i>Monday Schedule</i>	17 Vertebrates 1	18 Vertebrates 1
October	21 Vertebrates 1	22 Vertebrates 1	23 Vertebrates 1	24 Vertebrates 2	25 Vertebrates 2
October	27 Vertebrates 2	28 Vertebrates 2	29 Vertebrates 2	30 Practical #2	31 Practical #2
November	4 Practical #2	5 Practical #2	6 Practical #2	7 Histology	8 Histology
November	11 Histology	12 Histology	13 Histology	14 Blood	15 Blood
November	18 Blood	19 Blood	20 Blood	21 Behavior	22 Behavior
November	25 Behavior	26 Behavior	27 Behavior	28 <i>No Classes Scheduled</i>	29 <i>No Classes Scheduled</i>
December	2 Practical #3	3 Practical #3	4 Practical #3	5 Practical #3	6 Practical #3
December	9 <i>No Lab</i>	10 <i>No Lab</i>	11 <i>No Lab</i>	12 <i>No Lab</i>	13

No Lab = You have no Biology Lab; lectures and recitations will meet as scheduled.

No Classes Scheduled = No classes meet, the college is closed.

Principles of Biology II - Fall 2019

Month	Monday	Tuesday	Wednesday	Thursday	Friday
August	26	27 Photosynthesis (Ch. 10)	28	29 Photosynthesis (Ch. 10)	30
September	2 <i>No Classes Scheduled</i>	3 Transport in Plants (Ch. 36)	4	5 <i>Monday Schedule</i>	6
September	9	10 Transport in Plants (Ch. 36)	11	12 Genomes in Evolution (Chapter 21)	13
September	16	17 Speciation (Ch. 24)	18	19 First exam	20
September	23	24 Neurons, Synapses and Signaling (Ch. 48. 3-4)	25	26 Neurons, Synapses and Signaling (Ch. 48. 1-2)	27
September/ October	30 <i>No Classes Scheduled</i>	1 <i>No Classes Scheduled</i>	2	3 Nervous System (Ch. 49)	4
October	7	8 <i>No Classes Scheduled</i>	9 <i>No Classes Scheduled</i>	10 Motor Mechanisms (Ch. 50)	11
October	14 <i>No Classes Scheduled</i>	15 Circulation and Gas Exchange (Ch. 42)	16 <i>Monday Schedule</i>	17 Circulation and Gas Exchange (Ch. 42)	18
October	21	22 Cell Communication (Ch. 11)	23	24 Second exam	25
October	27	28 Cell Communication (Ch. 11)	29	30 Viruses (Ch. 19)	31
November	4	5 Viruses (Ch. 19) *	6	7 Immune System (Ch. 43)	8
November	11	12 Immune System (Ch. 43)	13	14 Immune System (Ch 43)	15
November	18	19 Third exam	20	21 Immune System (Ch. 43)	22

November	25	26 Cancer Biology (Supplement)	27	28 No Classes Scheduled	29 No Classes Scheduled
December	2	3 Cancer Biology (Supplement)	4	5 Cancer Biology (Supplement)	6
December	9	10 Cancer Biology (Supplement)	11	12 Stem Cells Last day of class	13 Reading day

No Classes Scheduled = No classes meet, the college is closed.

**Last day to withdraw from course with mark of "W"*

FINAL EXAM 12/17/19 from 5:20-7:20pm

Dr. Brazill will lecture from 8/27 - 10/17

Dr. Alaie will lecture on 10/22 - 12/12

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, Drs. Brazill & Alaie will discuss outside material, including figures and graphs, during lecture that you will be responsible for. Audio recordings are allowed with instructor consent. Video recordings are not allowed.

There are NO MAKEUP EXAMS in BIOL 102.

LECTURE: 700 pts

The first 3 Lecture exams are worth 150 pts each: 100 pts for multiple-choice questions + 50 pts for short response questions. The 4th (Final) exam, held on Tuesday 12/17/19 (5:20-7:20pm) will be worth 200 points in total: 100 points of multiple choice questions from material not yet tested (material since 3rd exam) and an additional 100 points of cumulative multiple choice questions. This cumulative portion will consist of multiple choice questions covering material from the 1st, 2nd and 3rd lecture exams.

Please note: if your 100 pt cumulative exam score (from the Final exam) is **higher** than any of your first 3 lecture exam **multiple choice** scores, the cumulative multiple exam score will replace the lowest of those **multiple exam** scores (and count double). For instance, if you score a 76 on exam #1, a 68 on exam #2, an 80 on exam #3 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 total will be 76, 80, 82, 82, (+ your score from the non-cumulative portion of the Final exam **which cannot be dropped**).

LAB: 300 pts

There are 3 lab practical exams scheduled during the semester (100 pts each). **Students must take lab practical exams with their registered section. No exams are allowed in a section other than your official registered section. There are no makeup lab practicals; please note the days of the practical exams in the lab calendar above.**

COURSE GRADE SUMMARY:

Lecture Exam 1	=	150 pts. (100 pts. MCQ and 50 pts. long answer questions)
Lecture Exam 2	=	150 pts. (100 pts. MCQ and 50 pts. long answer questions)
Lecture Exam 3	=	150 pts. (100 pts. MCQ and 50 pts. long answer questions)
Final Exam	=	200 pts. (100 pts. MCQ new material 100 pts. cumulative)
Lecture Quizzes	=	50 pts. (assignments to be posted throughout the semester)
Lab Practicals	=	300 pts.

1000 pts

Extra credit: 50 pts (earned through lab quizzes given at the start of lab class)

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 in which the lab exercise is offered** (see lab calendar above and at front of your lab manual for schedule). If you make up a lab, be sure to get a note from that instructor to verify for your own instructor that you attended that 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. Please note that there are no make-ups for missed practical exams. Do NOT miss your practical exams!

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 your instructor during your assigned recitation. Recitation instructors also hold regular office hours; a gathering where you may 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. **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. It may be helpful to keep an additional notebook for vocabulary words and questions.

INCOMPLETES (grade of INC). Students must submit a **request form** for a grade of INC for BIOL 102 before the start of the Final Exam on Tuesday 12/17/19. 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 for the Final Exam can be administered before the end of the Spring 2020 semester. An INC turns into an FIN at the end of the Spring 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 wish to take BIOL 102 for Cr/NCr, please complete and sign the form and then bring it to Dr. Alaie or Dr. Brazill **before** the start of the Final exam. Please note that health science programs do not accept Credit/No Credit grades; only letter grades are acceptable for these programs. Each year we get requests from students to have their Cr/NCr grade changed back to a letter grade. Since the Cr/NCr form is a contract with the college we are obliged to turn down such requests. Before requesting a Cr/NCr grade, please consider the consequences very seriously.