

Please note that this is a STEM variant course, which permits the inclusion of an introductory major course of more than 3 credits for STEM fields

Lecture Syllabus Principles of Biology I (BIOL 100)– Fall 2010

Lectures: Tuesday/Thursday 5:35pm- 6:50pm in Assembly Hall North.

Hunter

Course coordinator: Dr. Adrienne Alaie

Office hours: Wednesdays from 11am- 1pm and by appointment.

Office location: 818N

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Office phone: (212) 650-3238 (no voicemail set-up)

Texts: 1. Campbell's 8th Edition Biology. ISBN: 0536404178.

2. Alaie and Jaeger (Fall 2010) Principles of Biology I Laboratory Manual. ISBN: 978-0-7380-3775-2.

Multiple copies of Campbell's text and lab manual are on reserve in the Socrates Center (B118), B1 level of the library.

Multimedia learning Center: Socrates Center (B118) B1 level of library. Mr. Sam Gelman, Director of the Socrates Center.

Mr. Gelman's email: sgelman@hunter.cuny.edu

Socrates Center website: <http://socrates.hunter.cuny.edu>

Course TAs: listed on Socrates website under "People" tab.

Learning Outcomes:

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

1. describe and discuss the structure of macromolecules and their functions in pro- and eukaryotic cells.
2. describe and discuss bioenergetics; the cell cycle and gene expression.
3. use Mendelian and molecular genetics to solve problems.
4. understand various forms of graphical and quantitative data and apply data to solve problems.
5. employ the scientific method: (identify problem or question, develop hypothesis, design experiments to test hypothesis, reach conclusion).

	Monday	Tuesday	Wednesday	Thursday	Friday
Aug				26 Chapter 2 (pgs 30-45) Chemical Context of Life	27
	30	31 Chapter 3 (pgs 46-57) Water & Fitness of Environment	1	2 Chapters 4 & 5 (pgs 58-67; pgs 68-91) Carbon & Molecular Diversity/ Macromolecules	3
Sept	6 <i>College Closed (Labor Day)</i>	7 Chapter 5 (cont.) (pgs 68-91) Structure & Function of Macromolecules	8	9 <i>No Classes</i>	10 <i>No Classes</i>
	13	14 <i>(Classes follow Friday schedule)</i>	15	16 Chapter 7 (pgs 125-141) Membrane Structure and Function	17 <i>No Classes</i>
	20	21 Chapter 7 (cont.) (pgs 125-141) Membrane Structure and Function	22	23 Chapter 6 (pgs 94-124) Tour of the Cell	24
	27	28 Chapter 6 (cont.) (pgs 94-124) Tour of the Cell	29	30 Chapter 8 (pgs 142-161) An introduction to Metabolism	1
Oct	4	5 Exam I (All material covered to date)	6	7 Chapter 8 (cont.) (pgs 142-161) An introduction to Metabolism	8
	11 <i>College Closed (Columbus Day)</i>	12 Chapter 9 (pgs 162-184) Cellular Respiration	13	14 Chapter 9 (cont.) (pgs 162-184) Cellular Respiration	15
	18	19 Chapter 10 (pgs 185-205) Photosynthesis	20	21 Chapter 10 (cont.) (pgs 185-205) Photosynthesis	22
	25	26 Chapter 12 (pgs 228-245) The Cell Cycle	27	28 Chapter 12 (cont.) (pgs 228-245) The Cell Cycle	29
Nov	1	2 Chapter 13 (pgs 248-261) Meiosis and Sexual Life Cycles	3	4 Chapter 14 (pgs 262-285) Mendel and the Gene Idea	5

8	9	10	11	12
	Exam II (All material covered since Exam I)		Chapter 15 (pgs 286-304) Chromosomal Basis of Inheritance	
15	16	17	18	19
	Chapter 15 (cont.) (pgs 286-304) Chromosomal Basis of Inheritance	Last day to drop with grade of "W"	Chapter 16 (pgs 305-324) Molecular Basis of Inheritance	
22	23	24		
	Chapter 16 (cont.) (pgs 305-324) Molecular Basis of Inheritance		25 <i>College Closed (Thanksgiving)</i>	26 <i>College Closed (Thanksgiving)</i>
29	30	1	2	3
	Chapter 17 (pgs 325-350) From Gene to Protein		Chapter 17 (cont.) (pgs 325-350) From Gene to Protein	
Dec				
6	7	8	9	10
	Chapter 18 (pgs. 351-380) Regulation of Gene Expression		Chapter 18 (cont.) (pgs. 351-380) Regulation of Gene Expression	
13				
Last day of classes				

Note: Extra credit essay given during recitation class of each section (12/6 - 12/10)
There are no make-up exams given for the multiple choice portions of the midterms or for the extra credit essay.

Final exam: Tuesday, December 21, 2010 from 5:20 - 8:30 PM.
(The final exam is cumulative and consists of multiple choice questions only; no essays.)

All persons, whether registered for the class or not, are prohibited from using cameras, audio and/or video recording devices in class without written permission from Dr. Alaie. Lecture notes, exams, audio recordings, video recordings and/or still pictures may not be published, duplicated, distributed, sold or posted on the Internet. Any student who violates this policy will be subject to academic and disciplinary action by the Biology Department and Hunter College.

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."