

Biology I (BIO150) Syllabus

Mini-Mester: May 18th-June 4th, 2010

Instructor: Ron Kaltreider, Ph.D.
Office: LS206
Phone: 815-1956 (office)
Email: rkaltrei@ycp.edu
Times: BIO150.101 8:30 am-1:30 pm MTWHF
Rooms: Lecture: CH223
Lab: LS200

Textbooks:

Text: **Biology**, Custom Edition for York College of Pennsylvania. Campbell, Reece, Urry, Cain, Wasserman, Minorsky, Jackson. ISBN 13: 978-0-536-89784-8.

Laboratory Topics for Biology I, 16th Edition. York College of PA, 2009-2010. [Purchase a 3-ring binder to store your lab manual and supplements.

Websites:

Text: <http://www.masteringbio.com/site>

Instructor: <http://goose.ycp.edu/~rkaltrei/>. My site contains lecture notes, assignments, exam study guides, and a link to the textbook web site. The assignments and lecture notes will be continually updated throughout the semester.

Course Description and Objectives:

This is the first course for all biology majors and provides the foundation for subsequent biology courses. It introduces fundamental principles of molecular and cellular biology that are critical for a conceptual understanding of biology. Themes examined during the semester will be the chemistry and requirements of life, the structure and function of cellular components, biochemical pathways, genes and inheritance. These concepts will be re-enforced and expanded upon through hands-on laboratory based experiments that complement the lecture material. This class will provide you with an understanding of the fundamental concepts and principles of biology through lecture and laboratory based instruction.

Examinations and Grades:

Grading Scheme:

Lecture: 60% of Course Grade

Exams (4): 100 points each

Laboratory: 40% of Course Grade

Lab Worksheets (13): 20 points each

Lab Exams (2): 100 points each

Grades	4 = 90% and above	2 = 70-74%
	3.5 = 85-89%	1 = 60-69%
	3 = 80-84%	0 = 59% and below
	2.5 = 75-79%	

Exams: The lecture/lab schedule shows the dates of each lecture and laboratory exam. Barring documented illness or family emergency, failure to take the exam at the scheduled time will result in a grade of ZERO for that exam. Please try to contact me prior to the scheduled exam period, although if an emergency should arise (*i.e.* a 2 AM trip to the emergency room) do not “stress-out” about getting in touch with me immediately just inform me at your earliest convenience.

Attendance:

Lecture: All students are expected to attend all scheduled classes. Conceptual understanding of Biology, like all science courses, requires students to actively engage and interact with their colleagues. Although I will not take daily attendance, I will monitor and note excessive absenteeism (greater than 2 Un-excused absences). Chronic tardiness to class or lab is very disruptive to the class, so please be on time. I will not directly penalize you for excessive absences or tardiness, although they may effect your grade through the following: 1) Student becomes responsible for obtaining the lecture notes and handouts from his/her fellow students, 2) Grades will NOT be rounded in the students favor (a 79.9 is a C not a B), 3) In class assignments (Quizzes) cannot be made up.

Lab: Attendance for lab is **mandatory**. No Make-up labs will be given.

Assignments:

Examinations: Lecture exams will consist of (but not limited to) multiple-choice, fill-in-the-blank, short answer, problems, and diagrams. Questions will be based on material covered in class, which includes readings from the text. Test questions may also come from specific and assigned text readings, which were not directly covered in lecture.

Lab Worksheets: Each of the biology labs will have a worksheet (WS), which must be completed by the student and will be collected at the beginning of the following lab meeting.

Late Work: All assignments are due within the first 5 minutes of class on the date indicated. Grades on late assignments will reflect a 10% deduction per day late unless prior arrangements have been made with the instructor.

Re-grading Policy: If you think that an error was made on your exam, quiz, worksheet, or lab report, **you may return it for re-grading within 3 days of the return of the exam/report. No exceptions.** Also you must clip to the graded item a **typed** explanation of what you think the error in grading. Late re-grades requests and requests that are not typed will not be regarded. Note: I routinely photocopy exam pages prior to returning them to you (see Academic Honor Principle).

Maintaining Copies of Grades Assignments: It is the student's responsibility to maintain hard (or computer) copies of all assignments in the unlikely event that an assignment becomes lost, damaged, or destroyed while in my possession. Also students are required to save all copies of graded material (reports, quizzes, tests, worksheets, *etc.*) for grade verification if necessary.

Standards:

Writing standards: You are expected to use proper English grammar and spelling on all written material submitted for this course. Content of your writing will be my primary focus during grading, although your effectiveness at writing will also be considered in your overall grade. The Learning Resource Center is available to all students seeking to improve their writing and study skills.

Students with disabilities: Students with disabilities, physical or learning, are encouraged to contact me within the first week of class so that we have time to implement any accommodations required. Through consultation with the Academic Advising and Learning Resource Center, we will plan an appropriate strategy for completing the academic requirements of the class.

**ACADEMIC INTEGRITY IN THE YORK COLLEGE
DEPARTMENT OF BIOLOGICAL SCIENCES**

Science and the teaching of science represent a search for truth and they rest on ethical behavior and intellectual honesty. As such, both the Department of Biological Sciences and York College of Pennsylvania unequivocally condemn academic dishonesty. Academic dishonesty is defined in the York College Student Handbook as cheating, plagiarism, fabricating research, falsifying academic documents, etc. and includes all situations where students make use of the work of others and claim such work as their own. Because the Department of Biological Sciences maintains high expectations for all students and is committed to stringent standards of academic integrity, we contend that all published information, in any form, must not be used unless rigorously paraphrased and properly cited. Moreover, all tests, projects, assignments, and lab reports require a solo effort **unless specifically noted otherwise by the instructor**. This means that the sharing of text, images, tables, figures, or data analyses with classmates is a breach of academic integrity. Furthermore, providing such information to others will be considered as dishonest as accepting or taking the information.

Work done in lab may involve partners, but the formal partnerships end when the laboratory period ends. At the end of a lab, each partner should leave with his or her group's protocols, hypotheses, data, and any information about procedural problems. Once the in-lab work is completed, the work shifts from a group effort to a solo effort. This does not mean that students shouldn't discuss lab concepts, problems, and general strategies and broad interpretations. Talking about science is healthy and is encouraged. And, it is understood that lab groups may obtain similar or identical quantitative data for a given project. In the end, however, data analyses and report writing as well as the overall presentation and interpretation of these data are to be done independently by the individual and not by the group.

If work submitted by two or more students appears unexplainably and unreasonably similar, or if credit for previously published information or ideas is not given through literature citation, academic dishonesty will be assumed. In this event, the instructor will provide written notification to the student, the Department Chair, and the Dean of Academic Affairs of the charge and the sanction. Documentation related to instances of academic dishonesty will be kept on file in the student's permanent record. If the academic dishonesty is the student's first offense, the instructor will have the discretion to decide on a suitable sanction up to a grade of 0 for the course. The faculty member may request that the Student Welfare Committee conduct a hearing and decide on the sanction, which can involve academic suspension or dismissal from the College, if the faculty member believes the offense to be of an extremely egregious nature.

If the Dean of Academic Affairs determines that the breach of academic integrity is the student's second offense, the Dean will provide written notification to the student, the instructor, and the Department Chair. The Student Welfare Committee will automatically conduct a hearing to review the charge and decide on an appropriate sanction, which will involve academic suspension or dismissal from the College. Students are not permitted to withdraw from a course in which they have been accused of academic dishonesty.

If questions about academic integrity arise, see the course instructor before completing and submitting your work. In addition, specific information about the York College of Pennsylvania Academic Integrity Policy can be found in the most recent edition of the Student Handbook.

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Mini-Mester (May 18- June 4, 2010)**

Day	Date	Lecture Topic	Lab Topic	Assignment
Tuesday	May 18	Course Introduction/Syllabus Chapter 1: Themes in the Study of Life Chapter 2: Chemical Context of Life	1) Scientific Writing 2) Microscope and Cells	WS #1 WS #2
Wednesday	May 19	Chapter 2: Finish Chapter 4: Carbon and Molecular Diversity	3) Molecules of Life	WS #3
Thursday	May 20	Chapter 5: Structure and Function of Biomolecules	4) Electrophoresis	WS #4
Friday	May 21	Lecture Exam #1: Chap 1,2,4,5 Chapter 8: Introduction to Metabolism Chapter 9: Cellular Respiration	5) Enzyme	WS #5
Monday	May 24	Chapter 6: Tour of the Cell	6) Cellular Energy	WS #6
Tuesday	May 25	Chapter 7: Membrane Structure/Function	7) Cell Fractionation	WS #7
Wednesday	May 26	Chapter 7: Finish Chapter 11: Cell Communication	Lab Practical #1 (Labs 1-7)	
Thursday	May 27	Lecture Exam #2: Chap 8,9,6 Chapter 12: Cell Cycle/Mitosis Chapter 13: Meiosis	9) DNA Extraction Cell Division Video 8) Mitosis and Karyotypes	WS #9 WS #8
Friday	May 28	Chapter 14: Mendel and Gene Idea	10) Transformation	
Monday	May 31	BREAK NO CLASS (Memorial Day)		
Tuesday	June 1	Lecture Exam #3: Chap 7, 11-13 Chapter 15: Chromosomal Basis of Inheritance	10) Transformation 11) Biochemical Pathway	WS #10
Wednesday	June 2	Chapter 16: Molecular Basis of Inheritance Chapter 17: From Gene to Protein	11) Biochemical Pathway 12) GMOs Start	WS #11
Thursday	June 3	Chapter 18: Regulation of Gene Expression	12) GMOs Finish	WS #12
Friday	June 4	Lecture Exam #4: Chap 14-18	Lab Practical #2 (Labs 8-12)	

Disclaimer: This schedule is subject to change at the instructor's discretion.

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I, _____, have read this statement and the syllabus for this course and I understand and accept departmental and college expectations of academic integrity and ethical conduct.

Student's Name: (Please Print) _____