

BIOLOGY 181 General Biology (Majors) I
Fall 2009
Phoenix College
SYLLABUS FOR LAB SECTIONS # 36333, 36335, 36339, 36341

Anna Martí-Subirana, Ph. D.

Biology Department

Visit my Web Page at:

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Office hours: **MWTR:** 2:30 - 3:30PM **F:** 10 - 11AM or by appointment

Lab Sections: **27219:** M 11AM – 1:50PM **27221:** T 10AM – 12:50PM

27225: W 11AM – 1:50PM **27227:** R 10AM – 12:50PM

All lab sections will be held in room DB-108

Required Textbook and Lab Manual:

Biology, Campbell & Reece, 8th ed., 2008, Benjamin & Cummings.

(Students who **DO NOT** have to take BIO 182 might purchase *Volume I Biology, A Custom Edition for Phoenix College*. The volume contains all of the chapters necessary for the BIO 181 class)

Biology 181 Laboratory Manual, furnished by the Biology Department

(Textbooks are available at the PC bookstore)

CLASS FORMAT

The lecture and laboratory are designed to complement each other. Materials and topics are presented in a factual and theoretical format accompanied by an experimental format to demonstrate, verify, and solidify these concepts as well as to stimulate interest and develop the skills necessary for further inquiry.

There will be limited access to the lab outside of the scheduled time allotted and therefore, students should always be prepared and use their time methodically and efficiently. It is required that all lab exercises be thoroughly read before coming to the lab and that as many questions as possible be at least partially answered. There are limited supplies for the course and thus, they should be used by the student while in the student's possession and made available to others when not in use.

Students are always encouraged and will sometimes be required to form groups both in and outside of the class for the purpose of discussing, and/or reviewing, and forming conclusions concerning the materials covered in the class and laboratory. In addition, it is recommended that students form associations in the lab in order to complete the assignments and experiments in an

efficient, thorough, and timely fashion.

LATE ASSIGNMENTS

I will not accept late assignments. All assignments must be completed to pass the course. Assignments will be collected on the due date at the beginning of the class period. Lab work is considered an assignment.

ATTENDANCE

Lab attendance is mandatory. Attendance will be taken and recorded at every scheduled meeting. Anything beyond an unexcused absence will have an impact on your grade. According to school policy, students are allowed one (1) unexcused lab absence. Please be aware that additional absences will result in withdrawal by the instructor.

There are no makeup labs. Under no circumstances students will be allowed to attend any lab section different than the one they are registered. Students failing to attend a lab meeting will be given a score of 0 for that lab.

Please make every effort to be in the lab on time. Habitual tardiness will have the same effect on your grade than unexcused absences. You will lose 30 points for every lab quiz missed. The first time you come to lab late, I'll give you a warning. After two additional late arrivals, you'll be withdrawn from the course.

Your lowest lab score will be automatically dropped at the end of the semester.

Turning Point clickers will be used in class and in lab. Clickers must be returned to their case after every class or lab meeting. Failure to do so will result in a **10 point deduction** until clickers are returned.

EVALUATION OF LAB WORK

There will be two (2) short papers and thirteen (13) lab exercises, of different formats. **Lab exercises are worth 30 points each; short papers are worth 75 points each.** Lab quizzes consist of multiple-choice questions.

Missed Lab Quizzes: Lab quizzes will be given promptly at the beginning of the lab period. Lab quizzes will be based on the lab material covered in the preceding lab period, and will include a question pertaining to that day lab. **THERE ARE NO MAKEUPS on missed labs or lab quizzes.**

ACADEMIC MISCONDUCT

Students are expected to behave in an appropriate manner while attending this class. I expect students to be working only on this course during class time. Please avoid class interruptions such as beepers, pagers, and cell phones. Academic Misconduct includes misconduct associated with the classroom and laboratory learning process. Some examples of academic misconduct are cheating, plagiarism, excessive talking, excessive late arrivals, excessive early departures, excessive absences as well as any behavior that disrupts the class. **Cell phones, beepers, and**

audio devices must be turned off while in class. Text-messaging, music playing or music listening while in class or in lab would be considered disruptive behavior and, as such, will be dealt in accordance with college policies.

Please see *2009-2010 Phoenix College Catalog* for further information about PC Policies and Regulations.

DISABILITY RESOURCES AND SERVICES

The Disability Support Services (DSS) office coordinates services which will ensure equal access to college programs for students with disabilities. Services include interpreting for the deaf/hard of hearing, notetaking, reading, scribing, adaptive technology, testing accommodation, alternative text formatting, and special seating arrangements. Some classroom accommodations such as interpreting services, audio taped texts and handouts, enlarged print and brailled materials require preparation time. For this reason, students with disabilities are encouraged to contact the DSS office prior to registration and provide us with the necessary documentation. All disability-related information provided to DSS remains confidential.

Students who are aware of any physical or non-physical disability that may affect their performance in class are kindly encouraged to inform me during the first week of class, or to contact the Office of Disability Support Services (DSS) in the Learning Center Building (phone # (602) 285-7477 V/TDD) in order to accommodate their specific needs.

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LAB COURSE ITINERARY- Fall 2009

Week	Labs
Week 1 (Aug 24-28)	Lab 1: The Scientific Method
Week 2 (Aug 31- Sep 4)	Lab 2: Spectrophotometry. Standard Curves Lab 1 Quiz
Week 3 (Sep 7-11)	No Labs
Week 4 (Sep 14-18)	Lab 3: Factors Affecting Enzyme Function Lab 2 (Spectrophotometry) Mini Essay due
Week 5 (Sep 21-25)	Lab 4: Standard Curves and Guidelines for Writing a Scientific Paper Lab 4 Graphs due
Week 6 (Sep 28-Oct 2)	Lab 5: DNA Fingerprinting Lab 5 (DNA Fingerprinting) Worksheet due Paper 1 (Enzymes) Introduction and Results due
Week 7 (Oct 5-9)	Lab 6: Bacterial Transformation Lab 6 (Bacterial Transformation) Worksheet due
Week 8 (Oct 12-16)	Lab 7: Microscopy & Cells Lab 7 (Microscopy & Cells) Drawings due Paper 1 (Enzymes) due
Week 9 (Oct 19-23)	Lab 8: Transport Mechanisms
Week 10 (Oct 26-30)	Lab 9: Aerobic Respiration Lab 8 (Transport Mechanisms) Quiz Lab 9 (Aerobic Respiration) Worksheet due
Week 11 (Nov 2-6)	Lab 10: Genetic Disorders Library Lab Lab 10 (Library Lab) table due

Week 12 (Nov 9-13)	No Labs
Week 13 (Nov 16-20)	Lab 11: Photosynthetic Pigments and Photosynthesis
Week 14 (Nov 23-27)	Paper 2 (Genetic Disorders) due No Labs
Week 15 (Nov 30- Dec 4)	Lab 12: Cell Reproduction Lab 11 (Photosynthesis) Mini Essay due Lab 12 (Cell Reproduction) Worksheet due
Week 16 (Dec 7-11)	Lab 13: Mendelian Genetics
Week 17 (Dec 14-18)	No Labs