

Biochemistry Lab BCH 3033L

Spring 2017

Section 02: Thursday, 2:00 PM-5:50 PM

HLS 275

Prerequisites: General Biology I and II with labs, Organic Chemistry I and II with labs, General Biochemistry (co-requisite)

Instructor	Office Hours (OE-213)	email address
Dr. Jaime Mayoral	Tuesdays 2:30 PM - 4:30 PM	mayoralj@fiu.edu

Directions: The biochemistry lab will have two parts; the first 4 weeks will be introductory to different biochemistry techniques (with no research component) and after the fourth week it will have a research component. After the fourth week, each lab will begin with a workshop style introduction to some biochemical methods and be followed by experiments designed by the students to answer a student generated research question. Each group (composed of 4 students) will develop their own research question and the protocol to use to answer the question utilizing the reagents and equipment available. The week following that will be a Power Point presentation of each groups results as well as the TA lecture on the next experiment. Your grades will be partly determined by the research question and the Power Point presentation of your results.

Grading Policy

Each part of the course contributes to the final grade in the proportions shown here:

- Surveys – **1.5%**
- There will be determined by your research questions and your Power Point presentations – **48.5%**
- Daily Quizzes and Take Home Quiz –**25%**
- Lab Final Exam – **25%**

Tentative Grade Scale:

- A 90-100%
- B 80-89.5%
- C 70-79.5%
- D 60-69.5%
- F Less than 60%
- Point totals are rounded to the nearest whole point. The instructor will consult with the Professor in charge of the lab before assigning final grades for input into Panther Soft. This means the tentative grade scale can change based on unforeseen situations.

General Policies:

- CHEATING AND PLAGARISM ARE NOT TOLERATED! Students who cheat or plagiarize from someone else or an internet source will be dismissed from the class and given an "F" for the course.
- Attendance, and being on time, is essential and mandatory. A 3% is deducted per class absence, with one excused absence permitted (save it for a real emergency).
- Students will automatically receive an "F" if they have 3 or more unexcused absences.

Other materials **required** for the course are:

- Laboratory coat (available for purchase at bookstore)
- Safety goggles (available for purchase at bookstore)
- Closed toe shoes
- Long pants
- Computer with ability to generate graphs, e.g. Excel, Quattro, various statistical packages.
- For each week, students must print out the Lab Protocol (and Supplements) see below for that week and **READ IT** before class. Be sure to bring these to the lab!

Tentative Schedule

Date	Lab: See Blackboard for Lab Handouts	Lab Preparation
Jan 12	Introduction + Biochem intro exercises	
Jan 19	Spectroscopy – Quiz	
Jan 26	Lipids 1– Quiz	Take Home Quiz due
Feb 2	Lipids 2– Quiz	
Feb 9	Electrophoresis – Quiz	Research Hypothesis due next day.
Feb 16	Electrophoresis: Research	Your experiment using PAGE.
Feb 23	Electrophoresis: Research Presentation	Power Point Presentation.
Mar 2	Enzyme Lab – Quiz	Research Hypothesis due next day.
Mar 9	Enzyme Lab: Research	Your experiment using enzyme kinetics.
Mar 16	*No class* Spring Break	
Mar 23	Enzyme Lab: Research Presentation	Power Point Presentation.
Mar 30	DNA Research part 1– Quiz	
Apr 6	DNA Research part 2 – Quiz	
Apr 13	DNA Lab: Presentations	Power Point Presentation.
Apr 20	Final Exam	

Syllabus is subject to change at the discretion of the professor