

Biochemistry Lab BCH 3033L

Fall 2016

Section 01: Thursday, 9:30AM-1:20PM-----Section 02: Thursday, 2:00-5:50PM

HLS 275

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

TA/Section	Office (OE 219) Hours	email address
Jaime Mayoral	Just Before and After Lab Sessions	mayoralj@fiu.edu

Directions: this Biochem lab has a research component. After the first 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 pair of 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

This course contains a total of **200** points:

- There will be determined by your research questions and your Power Point presentations - **100** points.
- 7 Daily Quizzes and Take Home Quiz (5 points each) – **50** points.
- Lab Final Exam – **50** points.

Tentative Grade Scale:

- A 180-200 points
- B 160-179 points
- C 140-159 points
- D 120-139 points

- F Less than 120 points
- Point totals are rounded to the nearest whole point. The TA's 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.
- 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)
- Ability to computer 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

Lab Experiments are in Adobe's pdf format.

Date	Lab	Lab Preparation
Aug 25	Introduction	Take home quiz
Sept 1	Spectroscopy -----Quiz	Colorimetry and Spectra
Sept 8	Spectra: Research	Your experimental design in action.
Sept 15	Spectra: Research Presentation + Intro to Protein Separation	PowerPoint Presentation. Intro to Next Week Lab
Sept 22	Chromatography and Electrophoresis--Quiz	Column Chromatography
Sept 29	PAGE-----Quiz	Native PAGE
Oct 6	PAGE Research	Your experiment using Native PAGE
Oct 13	PAGE Research Presentation + Intro to Enzyme Expts	Power Point Presentation. Intro to Enzyme Experiments
Oct 20	Enzyme Lab 1 Enzyme Lab 2 Enzyme Lab Procedures ----Quiz	Enzyme Lab Data Analysis Sheet

Oct 27	Enzyme Research	
Nov 3	Enzyme Research Presentation + Intro to DNA Lab	Power Point Presentation + Intro to DNA Experiments
Nov 10	DNA Lab ----- Quiz	DNA Lab Supplement
Nov 17	DNA Research	
Nov 24	THANKSGIVING HOLIDAY	
Dec 1	DNA Research Presentations	
Dec 8	Final Exam	