

EVPP 210: Molecules & Cells

David King Hall Room 3021

Laboratory Syllabus – Fall 2021

EVPP 210-201: Tuesday 10:30am -1:10pm
EVPP 210-202: Thursday 10:30am – 1:10pm
EVPP 210-203: Friday 10:30am – 1:10pm

Instructor

Samantha Mohney

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Office Hours: By Appointment Only

Lab Manual: *Introductory Cell Biology: Lab Manual*, 2nd edition, George Mason University.

Schedule

Lab Dates	Lab Manual	Quiz	What's Due at the End of Lab
8/24-8/27	Introduction, Lab Safety Rules, Emergency Contact Form Math/Chem Worksheet Experiment 1: Scientific Method & Sample Size		Lab worksheet, signed Lab Safety Consent Form
8/31-9/3	Experiment 3: Qualitative Analysis of Biomolecules	Quiz #1	Math/Chem Worksheet (start of class) Lab Worksheet
9/7-9/10	LABOR DAY: No class this week		
9/14-9/17	Experiment 4: Extraction of Proteins		Lab Worksheet
9/21-9/24	Experiment 5: Quantitative Analysis of Proteins	Quiz #2	Lab Worksheet
9/28-10/1	Experiment 6: Enzyme Activity		Lab Worksheet
10/5-10/8	Experiment 6, continued: Enzyme Activity		Lab Worksheet

10/12-10/15	FALL BREAK: No lab this week NOTES: Mid-term progress report grade due Oct. 18		
10/19-10/22	Experiment 2: Introduction to Microscopy	Quiz #3	Lab Worksheet Report Section 2 (Introduction & Methods)
10/26-10/29	Experiment 7: Extraction and Analysis of Plant Pigments		Lab Worksheet
11/2-11/5	Experiment 8: Mitosis and Meiosis and Cell Division	Quiz #4	Lab Worksheet
11/9-11/12	Experiment 9: Extraction and Analysis of Nucleic Acids	Quiz #5	Lab Worksheet Report Section 3 (Results and Discussion)
11/16-11/19	Experiment 10: DNA Fingerprinting, Review Techniques	Quiz #6	Lab Worksheet
11/23-11/26	THANKSGIVING: No lab this week		
11/30-12/3	Comprehensive Practical Final Exam during regular lab time		Full Lab Report Due

Grading

6 quizzes, lowest will dropped	n = 6; drop lowest, 10 pts each	50 pts
Math/Chem Worksheet	n = 1; 10 points	10 pts
Enzyme Laboratory Reports	n = 1; 20 points	20 pts
Lab worksheets, lowest dropped	n = 11; drop lowest, 5 pts each	50 pts
Final Lab Practical Exam	n = 1; 20 pts	20 pts
Totals		150 pts

The quizzes will be given at the beginning of the lab period. If you are absent you cannot make up a quiz. The lowest quiz grade will be dropped for calculation of your lab grade. Questions on the quizzes will come primarily from the lab exercises since the last quiz but may also come from the lab exercise to be performed that day.

Lab worksheets will be completed during the laboratory period and will be turned in at the end of the laboratory exercise. One lab worksheet score will be dropped; therefore, they will not be accepted at any other time. Instructors can deduct points from your worksheet grade due to failure to follow directions or lack of participation in class.

A lab report will be written on the Enzyme labs (Experiment 6). You will turn in different sections of your lab report as a group indicated in the syllabus. Once the graded sections of your report have been returned to you, you will submit a final version of the enzyme report that represents your best effort. Detailed directions will be provided on how to write up the report.

A practical final exam will be administered during the final lab period. This test requires students to demonstrate PROFICIENCY in the theoretical as well as in the technical aspects of lab exercises performed during the semester, for example: making dilutions, using the spectrophotometer and/or other equipment used, and the ability to interpret results, etc.

Attendance

Students are expected to attend lab and are expected to be ready to start lab at the designated start time. Students who are tardy to lab risk missing important information regarding the day's experiment. Those who are tardy will be permitted to participate in the experience but will not receive worksheet credit for the day's work. Students who are late to a quiz will be permitted to take the quiz in the time remaining to all students, but no more. Tardiness will not be tolerated for the lab practical; tardy students will not be permitted into the classroom if they are late for the practical.

Honor Code: **Student members of the George Mason University academic community pledge not to cheat, plagiarize, steal, or lie in matters related to academic work.** While you will be working within a group of students, the work you turn in must be your own work. You and your lab partner(s) may have the same data, but you must present the data your own way, and express your conclusions in your own words.