

Biology 313

Molecular and Cellular Laboratory
FALL SEMESTER 2013

1 Credit

INSTRUCTOR: Dr. Peter Fuerst

TA: Aaron Simmons

Dr. Peter Fuerst

OFFICE: Room 145 Life Sciences Building

EMAIL: fuerst@uidaho.edu

OFFICE HOURS: R 8:30-9:30 and 2:30-4:30 except:

August 15 8:30-9:30 and 3:30-4:30

August 22 8:30-9:30 and 3:30-4:30

August 29 8:30-9:30 and 3:30-4:30

September 12 8:30-9:30 and 3:30-4:30

September 19 8:30-9:30 and 3:30-4:30

November 14 8:30-9:30

November 21 8:30-9:30

December 5 2:30-4:30

Aaron Simmons

OFFICE: Room 352 Life Sciences Building

EMAIL: simm7761@vandals.uidaho.edu

OFFICE HOURS: T 12:00-2:00 and by appointment

Lab Sections:

1—T 8:30-11:20; LIFE 167

2—T 2:30-5:20; LIFE 167

3—R 9:30-12:20; LIFE 167

Lab Expectations:

Lab protocols will be placed in your BBlearn site by Friday 5 PM the week before lab. Students are to read over the material before lab to familiarize your selves with the protocols to be performed and to prepare for a possible quiz before lab concerning the day's material.

Learning Outcomes: At the end of this course students should be familiar with basic research techniques in cell and molecular biology such as PCR, WBA, RT-PCR and the use of antibody reagents. Students will know how to use a pipetman, pour and load an

agarose gel, make dilutions and stain tissues. Students will know how procedures they perform work at a mechanistic level.

Lab Over View/Lab schedule

Aug	27-29	NO LAB first week
Sept	3-5	Introduction & lab safety & Microscope 313 (Lab 1)
	10-12	Cell Fractionation 313 (Lab 2)
	17-19	Protein electrophoresis (Lab 3)
	24-26	Cell surface receptor 313 (Lab 4)
Oct	1-3	Elisa (Lab 5)
	8-10	Lab Exam 1
	15-17	RNA ISOLATION 313 (Lab 6)
	22-24	RT_PCR 313 (Lab 7)
	29-31	Gel Electrophoresis for PCR product (Lab 8)
Nov	5-7	Meiosis (Lab 9)
	12-14	Immunohistochemistry (Lab 10)
	19-21	Lab Exam 2
	26-28	NO LAB—Thanks Giving Break
Dec	3-5	Student Presentation
	10-12	Student presentation
	10-12	NO LAB—Finals Week

Breakdown of Assignments	Points
1 st exam	100
2 nd exam /Final exam	100
Lab notebook first half semester	50
Lab notebook second half semester	50
Lab quizzes (5)	100
Presentation	50
Total	450

Grading

Grades will be based solely upon the percentage of total points you have accumulated.

90% or greater of the total accumulated points	= A
80%	= B
70%	= C
60%	= D
Below 60%	= F

Unexcused absence

Labs and quizzes cannot be made up if you are absent

- One absence will result in your final grade being lowered by one level (for example B to C)
- Two absences will directly result in failure of the course.

Rules for the course

- **You must read the lab manual section you will cover for the day before coming to class to familiarize yourself with the procedure for the day.**
- **Quizzes will be based on this material and given on random lab days before labs begin and concern basic material from that days lab period.**
- **Plagiarism is a form of academic dishonesty; any student that plagiarizes another writer will receive a grade of “F” for the course. If you have any doubts about what constitutes plagiarism, see me (also see rules of the course below).**

Academic Honesty

The rules for this course are outlined in the “Student Code of Conduct” for the University of Idaho. The most important of these rules are listed below:

ARTICLE II--ACADEMIC HONESTY.

1. Cheating on classroom or outside assignments, examinations, or tests is a violation of this code. Plagiarism, falsification of academic records, and the acquisition or use of test materials without faculty authorization are considered forms of academic dishonesty and, as such, are violations of this code. Because academic honesty and integrity are core values at a university, the faculty finds that even one incident of academic dishonesty seriously and critically endangers the essential operation of the university and may merit expulsion. [rev. 7-98]
2. The operation of UI requires the accuracy and protection of its records and documents. To use, make, forge, print, reproduce, copy, alter, remove, or destroy any record, document, or identification used or maintained by UI violates this code when done with intent to defraud or misinform. Entrance without proper authority into any private office or space of a member of the faculty, staff, or student body is a violation of this code.
3. Instructors and students are responsible for maintaining academic standards and integrity in their classes. Consequences for academic dishonesty may be imposed by the course instructor. Such consequences may include but cannot exceed a grade of “F” in the course. The instructor should attempt to notify the student of the suspected academic dishonesty and give the student an opportunity to respond. The notice and the opportunity may be informal and need not be in writing. Penalties for any disciplinary infraction must be judicially imposed. [See [1640.02 C-5](#)] [rev. 7-98]