BIMM 101 Recombinant DNA Techniques Winter 2012

Dr. Stephanie Mel

York 4070E

Office hours: Monday 1 PM – 2 PM*

NOTE NEW TIME, or by appointment

smel@ucsd.edu

Lectures: Tues/Thurs 8– 9:20 AM Solis 104

Labs: Tues/Thurs 9:30 – 1:30 York 4318 and 4432

Wed/Fri 9 AM – 1 PM York 4318 and 4432

TAs: Naina Kurup nkurup@ucsd.edu (tu/th) nkurup@ucsd.edu (tu/th) x3zhu@ucsd.edu (tu/th)

Jennifer Manegold <u>x3zhu@ucsd.edu</u> (tu/tn/ Jennifer Manegold <u>jmanegol@ucsd.edu</u> (w/f)
Chloe Rivera <u>chloe9@gmail.com</u> (w/f)

Learning objectives:

- Learn the theory behind molecular techniques, and the applications of the methodologies in biological research
- Become proficient at basic molecular biology techniques
- Learn the importance of proper controls in designing experiments and interpreting results
- Improve lab math skills and ability to graph data correctly
- Learn to make logical conclusions from experimental data
- Become familiar with bioinformatics websites
- Learn to find, read, and evaluate primary literature
- Become aware of the implications of the technology for society

Texts:

BIMM 101 Lab Manual from University Readers – WINTER 2012 VERSION REQUIRED

From Genes to Genomes by Dale (1st or 2^{cd} edition) on reserve at BML and electronic version available from UCSD computer

http://onlinelibrary.wiley.com/book/10.1002/0470856912

Readings listed on TED

Required Materials - needed by second day of class:

Labcoat (the bookstore has cheap ones)
UV blocking safety glasses (also at bookstore)

Lab notebook with carbon copies (bookstore or Grove general store)

Grading will be based on the following:

1. Quizzes: There will be 7 quizzes, given on Tuesday or Wednesday of each week. There is no quiz Week 1, no quiz on Tues. Jan 31/Wed. Feb. 1 (week of midterm) and no quiz on Tuesday/Wed March 13/14 (week of final). The quizzes will mostly cover material from the previous week as well as general information about what you are doing that day in lab. Quizzes are to some degree cumulative (I will explain in class). You can drop one quiz score so your course grade will include a total of 6 quizzes. If you need to

miss a lab due to an interview, medical appointment, etc. *this is the quiz score that you will drop*. If you sleep late and miss a quiz, this is the score you will drop. Each quiz is worth 5% of your grade, for a total of 30% of the course grade.

- 2. Homeworks: there will several homework assignments due throughout the quarter, of varying lengths. The total value of the homeworks will be 25% of your grade. Late policy: homeworks are due at the beginning of the lab on the assigned date. For each day thereafter, you will lose 10% off the total.
- **3. Exams:** there will be 2 exams given in LECTURE, one on THURSDAY FEB. 2 (20% of final grade) and one on THURSDAY MARCH 15 (25% of final grade).
- **4. Lab notebook:** it is mandatory that you keep a lab notebook, with carbon paper. Please note the notebook requirements on page 161 162 of your lab manual. You will need to attach carbons of relevant labs to all homeworks you hand in (I will indicate which lab #s to include). The carbons you hand in with homeworks will be graded as part of those assignments.
- **5. Lab performance-** You can **lose points** if you are not a good lab citizen. When assigning the final grade, your effort, attitude, and the quality and success of your experiments, as well as the completeness of your lab notebook will be considered. This could make a difference if you are on the borderline between 2 grades.
- **6. Lab attendance is required –**If you miss one lab with no excuse, **you will lose 5% from your final grade**. If you miss 2 labs you will receive an F for the course. If you are ill, you must leave a message with me, not your TA, and make up the lab in a way that I will determine. You must be on time for lab; the TAs go over the experiments at the beginning of lab, and quizzes are administered right at the beginning of class.

Note: Just coming to lab does not ensure that you will get a passing grade in the class. You must hand in all assignments and get passing score on those assignments (an average of 65%) to get a C- in the class.

Policy on cheating: anyone caught cheating (includes plagiarizing homeworks, providing your homework to someone to copy, cheating on a test, or changing an answer for a regrade) will be reported to the Academic Integrity Office. You will sign a student contract on academic integrity the first day of class.