

## **BIMM 101 Recombinant DNA Techniques Winter 2011**

Dr. Stephanie Mel  
York 4070E  
smel@ucsd.edu

Office hours: Monday 10 – 11 AM  
or by appointment

**Lectures:** Tuesday/Thursday 8 – 9:20 AM

CSB 001

**Labs:** Tuesday and Thursday 9:30 AM – 1:30 PM  
Wednesday and Friday 9AM to 1:00 PM

York 4318 and 4332  
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**TAs:** Britt Flaherty [blflahe@ucsd.edu](mailto:blflahe@ucsd.edu)  
Bryan Bishe [bbishe@ucsd.edu](mailto:bbishe@ucsd.edu)  
Amanda Herman [abherman@ucsd.edu](mailto:abherman@ucsd.edu)  
Daniel Egan [egan@salk.edu](mailto:egan@salk.edu)

### **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 - REQUIRED

*From Genes to Genomes* by Dale (1<sup>st</sup> or 2<sup>nd</sup> edition) on reserve at BML and electronic version available from UCSD computer

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

Readings on WebCT ([webct.ucsd.edu](http://webct.ucsd.edu))

### **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)

**Remember that lab attendance is required – if you miss two labs, you will be asked to drop the course.** If you are ill, you must leave a message with your instructor, not your TA, and make up the lab in a way that we will determine. You must be on time for lab; the TAs go over the experiments at the beginning of lab, and also quizzes are administered then.

## **Grading will be based on the following:**

**1. Quizzes:** There will be 7 quizzes, given on Thursday or Friday of the week, beginning on Thursday Jan. 13/Friday Jan. 14. 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. There are no quizzes the week of the midterm or final.

**2. Homeworks:** there will be 4 or 5 homework assignments due throughout the quarter, of varying lengths. The total value of the homeworks will be 35% 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. 3 (15% of final grade) and one on Thursday March 10 (20% of final grade).

**4. Lab notebook:** it is mandatory that you keep a lab notebook, with carbon paper. The notebook must contain the following (see back of lab manual for more details): 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.