

BIMM 101 Recombinant DNA Techniques Fall 2009

Dr. Mandy Butler
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Office hours: Wed 10-11 AM
York 3080 D

Lectures: York 4080 T-Th 8:00-9:20 AM
Labs: York 4318 and 4332 T-Th 9:30-1:30 PM

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 databases and applications
- Learn to find, read, and evaluate primary literature
- Become aware of the implications of the technology for society

TAs: Yangbin Gao ihavegone@gmail.com
Colin Lam cnlam@ucsd.edu

Required texts:

BIMM 101 Lab Manual from University Readers
From Genes to Genomes by Dale (2cd edition) also on reserve in BML
Readings on WebCT (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 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 also pop quizzes are administered then.

1. **Quizzes:** Once a week on Thursday, there will be a quiz on the lecture and lab experiments from the previous week. Also, questions on the general purpose of that day's lab may also be asked. See Webct calendar for dates (total worth 30% of final grade). See calendar for dates.

2. **Homeworks and lab reports:** there will be 1 lab report worth 20% of your grade and several shorter homeworks worth 15% of your grade.

Although you will be doing the experiments and collecting data with a partner, you must hand in your own homeworks and lab report, in your own words. **Copying someone else's lab report or homework is cheating (see below). You must submit your lab report to Turnitin.com**

Note that in presenting data, much of your homework and lab grade will depend on correct labeling of figures and graphing of data.

Late policy: homeworks and lab reports are due at the beginning of the lab on the assigned date. For each day thereafter, you will lose 10% off the total.

4. **Lab performance (5%)** Your lab performance grade will be based on your class attendance, effort, **attitude**, and the success of your experiments. If you miss one lab with no excuse, you will lose these points.

5. **Exams:** there will be cumulative final, worth 30% of the grade, on Dec. 3

6. **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):

- i. The date, title and purpose
- ii. Any changes in protocol
- iii. All data/results
- iv. All calculations done during experiments
- v. Observations

You will need to attach carbons of relevant labs to all homeworks and lab reports you hand in (I will indicate on lab reports which lab #s to include).

Policy on cheating: anyone caught cheating (includes plagiarizing lab reports, cheating on a test, or changing an answer for a regrade) will be reported to the Academic Integrity Office.

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 scores on those assignments (an average of 65) to get a C- in the class.

Letters of recommendation: if you think you may want me to write you a letter of recommendation at some point in the future, please save your lab reports and tests, for I will ask for some of them to review. Also, I will write letters only for those who receive a A in the course. Finally, even if you have a A, if you have never spoken to me or come to my office hours, I may not agree to write a letter for you.