BIMM 101 Recombinant DNA Techniques Winter 2015

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Office hours: Monday 11:30 AM – 12:30 PM or in lab

Lectures:	Tues/Thurs	8 – 9:20 AM	CSB 005
Labs:	Tues/Thurs	9:30 AM – 1:30 PM	4318 and 4332 York Hall

TAs:

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General 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 – this is required.

From Genes to Genomes by Dale (3rd edition) on reserve at BML and new 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 LAB
Labcoat (the bookstore has cheap ones)
UV blocking safety glasses (also at bookstore)
Lab notebook with carbon copies (bookstore or Grove general store)
Sharpie (thin, to write on tubes)

Grading will be based on the following:

1. Pre-lab worksheets: There will be a short worksheet due at the beginning of each lab. The worksheet will have a few questions about the lab that you are doing that day. You will find the answers in the lab manual for that day's experiments. Worksheets are due beginning lab 3. There will be a total of 16 worksheets. The total value of the worksheets is **5%** of your grade.

2. Quizzes: There will be 7 quizzes on Tuesdays, given right at the beginning of LAB. The quizzes will mostly cover material from the previous 2 labs, though they are to some degree cumulative. 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 unless special arrangements can be made*. 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.

Quizzes will be on the following days:

Quiz 1	Tues. Jan. 13
Quiz 2	Tues. Jan. 20
Quiz 3	Tues. Jan. 27
Quiz 4	Tues. Feb. 10
Quiz 5	Tues. Feb. 17
Quiz 6	Tues. Feb. 24
Quiz 7	Tues. Mar. 3

3. Homeworks: there will 4 homework assignments due throughout the quarter, of varying lengths. The total value of the homeworks will be **15%** 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 during the quarter. Exam #1 will be on Thursday November 6 and Exam #2 will be on the last day of class, Thursday December 11 . Exam #1 is worth **22%** of your grade and Exam #2 is worth **28%** of your grade.

4. Lab notebook: it is mandatory that you keep a lab notebook, with carbon paper. Please note the notebook requirements at the back 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. You will have random notebook checks and will **lose points** if your notebook is not complete.

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.

Policy on cheating: anyone caught cheating (includes plagiarizing homeworks, *providing your homework to someone to copy*, cheating on a test, changing an answer for a regrade, or any other act of academic dishonesty as described in the UCSD Academic Integrity Policy) will be reported to the Academic Integrity Office.