

## **BIMM 101    Recombinant DNA Techniques    Winter 2013**

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Office hours: Monday 11 AM – 12 PM  
or in lab  
office: 858-822-0603

<b>Lectures:</b> Tues/Thurs	8 – 9:20 AM	Center Hall 105
<b>Labs:</b> Tues/Thurs	9:30 AM – 1:30 PM	4318 and 4332 York Hall
Wed/Fri	9 AM – 1 PM	4318 and 4332 York Hall

TAs: Soohwan Oh	<a href="mailto:soo001@ucsd.edu">soo001@ucsd.edu</a>
Amy Taylor	<a href="mailto:a2taylor@ucsd.edu">a2taylor@ucsd.edu</a>
Zohreh Akhavanaghdam	<a href="mailto:zoom236@gmail.com">zoom236@gmail.com</a>
Bryan Arias	<a href="mailto:BryanHArias@gmail.com">BryanHArias@gmail.com</a>

### **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 –**

*From Genes to Genomes* by Dale (1<sup>st</sup> or 2<sup>nd</sup> 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 class:**

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. Quizzes:** There will be 7 quizzes, given on Tuesdays/Wednesdays. The quizzes will mostly cover material from the previous week, 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*. 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 during Week 1, Week 5 or Week 10 (weeks 5 and 10 will each have an exam).

**2. Homeworks:** there will several homework assignments (3 - 4) 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 during LECTURE. Exam #1 will be on Thursday February 7 and Exam #2 will be on the last day of class, Thursday March 14. Exam #1 is worth 20% of your grade and Exam #2 is worth 25% 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.

**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 a 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, 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.

**1. I understand that if I am late for lab on a day a quiz is given, I will not be allowed to take the quiz and will receive a 0 score for that quiz.**

\_\_\_\_\_  
Name

\_\_\_\_\_  
Date

All lab reports for the class must be independently written, i.e., **your own work in your own words**. While discussion of data among lab partners is encouraged, each student on their own must complete all text, references, figures, graphs, and tables. The submission of reports by lab partners that contain shared work is forbidden, and will result in points being deducted from both reports. The exception to this is when a figure is the raw data that is supplied to each member of the group (specifically absorption spectra and gel photographs). In this case the labeling of that figure must be done independently. If you have questions about the difference between discussing your work with others and unauthorized collaboration, please ask your instructor or T.A. for clarification.

Because lab reports are to be your own work in your own words, you may not copy to any extent current or past laboratory reports that were written by other students. This is known as plagiarism, which is a direct attempt by the student to present the work of others as their own, and is no different than cheating on an exam. Directly copying material from other sources without putting it in your own words is also plagiarism, even if the source is cited as a reference. Plagiarism in lab reports is rigorously sought out and penalized. Students are required to upload an electronic version of each lab report to Turnitin.com, where the report is screened with a plagiarism checker against all reports in the Turnitin database. All incidents of plagiarism will automatically be turned in to the Academic Integrity Coordinator. Following UCSD's Policy on Integrity of Scholarship ([www-senate.ucsd.edu/manual/appendices/app2.htm](http://www-senate.ucsd.edu/manual/appendices/app2.htm)), students found to have committed plagiarism or other academic misconduct will receive both an administrative (decided by the Council of Deans) and academic penalty (decided by the instructor). Furthermore, all submitted reports are retained in the Turnitin database. Similarity hits by the plagiarism checker will also reveal the name of the student who provided the plagiarized material. Giving one's own lab report to other students to allow them to copy material from that report is also academic dishonesty, and will be pursued and penalized as rigorously as for the student committing the plagiarism.

**2. I understand that if I plagiarize a lab report and it is detected by Turnitin.com, the matter will go to the Academic Integrity Office on campus. I also understand that if I give a lab report to a student who takes the lab in a subsequent quarter, and he or she plagiarizes my lab report, I will also be subject to disciplining by the Academic Integrity Office.**

\_\_\_\_\_  
Name

\_\_\_\_\_  
Date

