BIMM 101 Recombinant DNA Techniques Spring 2012

Dr. Mandy Butler Office hours Monday 2 to 3 PM
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Lectures: Tues-Thurs 12:30 -1:50 PM CSB 001
Labs: A01 and A02 T-Th 2:00 – 6:30 PM York 4318 and 4332
A03 W-F 11:00 – 3:00 PM York 3406

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

Required texts:

1. BIMM 101 Lab Manual from University Readers
2. From Genes to Genomes by Dale (1st or 2cd edition) on reserve at BML and electronic version available from UCSD computer or via Webpoxy
http://onlinelibrary.wiley.com/book/10.1002/0470856912
3. Readings 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)
Fine point Sharpie for labeling – get a dark color
Calculator

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:

1. **Quizzes: 24%** Starting on Apr. 10 and 11, there will be a quiz once a week at the beginning of lab (see schedule on TED). The quiz will cover the lecture and lab experiments from the previous week, and the purpose of that day's lab. There will be six quizzes, each worth 4% of your final grade. If you come into lab late and miss the quiz, you will receive a zero for that quiz. Total = 24% of final grade

2. Homeworks 28% there will be 4-5 homeworks, varying in worth, that will make up 28% of the final grade. The due dates will be posted on TED. All homeworks must be submitted to Turnitin on TED and must be handed in with the Turnitin receipt within 10 minutes of the start of you lab. Any homework's that are handed in late that day will be penalized by deducting 5% of the total grade; for each additional day a report is late, it will another 5% will be deducted.

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

3. Exams: There will be a midterm in lab on May 8 worth 16% of your final grade, and a second, longer midterm on June 7 worth 28% of your grade.

4. Lab performance and experimental success: 4% Your preparedness for lab and the success of your experiments will be considered when assigning this grade.

Absences: If you miss one lab with no excuse, you will lose 5% from your final grade. If you miss two labs, you will receive an F for the course.

5. Lab notebook: it is mandatory that you keep a lab notebook, with carbon paper (see back of lab manual for more details about what goes in the lab notebook).
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). The carbons will be part of the lab report and homework grades.

Final grade:
The final grade is based on a straight average of your scores. The cutoffs are strictly adhered to.

97+ = A+	80 up to -83 = B-
93 up to 97 = A	76 up to -79 = C+
90 up to 93 = A-	72 up to -75 = C
87 up to 90 = B+	67 up to -71= C-
83 up to -87 = B	60 up to -66= D
	Below 60 = F

Policy on cheating: anyone caught cheating (includes plagiarizing lab reports, cheating on a test, or changing an answer for a re-grade) 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 67) to get a C- in the class.

Letters of recommendation: if you think you may want a letter of recommendation at some point in the future, please save your graded lab reports. Letters of recommendation will only be written for students who receive an A or an A+, have good academic records and realistic goals, and who have been active participants in the in the course (this means that I need to know who you are because you have come to office hours, or asked and answered questions in class, etc.). If I think I don't know you that well or don't have too much to say about you, don't take it personally but I may decline your request to write a letter.

BIMM 101 Winter 2011 Student contract:

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 homeworks/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 homeworks are to be your own work in your own words, you may not copy to any extent current or past homeworks 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 reports is rigorously sought out and penalized. Students are required to upload an electronic version of each homework 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), 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 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 homework/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 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**.

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Name Date