BIMM 101 Recombinant DNA Techniques Spring 2016

Dr. Mandy Butler Office hours: Tuesdays 10:30-11:30 AM
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Lecture: Tues-Thurs 2:00 – 3:20 PM Sequoia 147

Lab Tues-Thurs 3:30 7:30 PM York 3306 and 3406

Learning goals:

- 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 Soft Reserves
2. From Genes to Genomes by Dale (1st, 2cd, or 3rd edition)
electronic version of 3rd and 1st edition available on Roger
3. Readings on TED

Required Materials – needed by second day of class:

Labcoat – must be to knees
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 – you cannot use a cell phone in lab or on quizzes!
iClicker
Long pants and close-toed shoes are required in lab at all times – no skin on feet or legs should be showing

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: 35% Starting on Apr 5, there will be a quiz once a week on Tuesdays at the beginning of lab each week for week 2, 3, 4, 5, 6, 7, and 8 (see calendar on TED). All other quizzes are worth 5%. The quizzes will cover the lectures, readings, and lab experiments from the previous week, and the purpose of that day's lab. I will post a study guide for each quiz on TED.

Note: If you come into lab late and miss the quiz, you will receive a zero for that quiz.

2. Assignments: 30% There will be both carbon submissions and homeworks varying in worth and format that will make up 30% of the final grade. Guidelines for each of the submissions will be posted on TED and due dates will be on the TED calendar. The homeworks must be submitted to Turnitin on TED and must be handed within 10 minutes of the start of your 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 homework is cheating (see below). This also means copying from past quarters!**

3. Exams 27%: There will be a comprehensive exam on the last day of class, Thursday June 2, during the lab period.

4. iClicker 4%: You must be in lecture and answer the clicker questions 50% of the time to get full credit and at least one answer must be correct. (See clicker notes below).

5. Lab performance 4%: this grade will be based on the quality and success of your experiments, your preparedness for lab, your effort, and your cooperativity in lab.

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.

Final grade:
The total points for the course is 500. Grades will be based on your total points as a percentage of 500. 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: 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 that you have 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 will probably decline your request to

write a letter. If you think you may want a letter of recommendation at some point in the future, please save your graded home-works.

Clickers in BIMM101

Getting clicker points towards your grade is very simple – show up to class, watch for the clicker questions, read them, and click in with your answer. All clicker points are for participation only and are not graded.

Q. What kind of clicker should I buy and where can I get it.

The i-Clicker, preferably version 2, although the regular i-Clicker works too. You can get one at the UCSD bookstore. I-Clicker 1 has had issues with "remembering" class settings even within the course of a lecture.

Q. Can I share a clicker with another student?

NO!

Q. Where and when should I register my clicker?

Register it on class Ted site. Look for the link in the Tools folder and complete the registration by April 1.

Q. When do the scored clicker questions start?

On Thursday April 1 in lecture.

Q. What are the max points possible?

20 = 4% of your grade.

Q. How many days will we have clicker questions?

18

Q. How many days will I have to be present to qualify for the full 20 points?

16 (so you get 2 days when you can be absent and not lose out)

Q. How many points is each day worth?

1.25 points = 1 x 16 days for a maximum of 20 clicker points (0.75 pts for answering at least 50% of the questions plus 0.50 pts for getting at least one right.) At least one of the questions will be about the purpose of that day's lab so that you will have to at least read ahead and know what the main purpose of the day's lab.

Q. How do I get the 1.25 point each day?

Typically there will be three to four clicker questions a day – so you have to answer at least two of them, and at least one of those answers has to be correct.

Q. Is there partial credit for days when I click in to less than half of the questions?

No, on days when you are absent or present and don't click in, or present and click in to less than half of the questions, you get no points. It pays to click in. This is also why we have the 2 "permitted" absence days – so you don't have to ask me for credit.

Q. If my battery fails, or I forget my clicker, but I do attend the class, do I get clicker points for that day?

No, see answer to question above. This would fall under the 2 “permitted” absence days – so we don’t have to negotiate credit and you can still get all 20 points from the remaining days attended.

Q. If I attend less than 16 lectures, will I get any points?

Yes, you can still get 1.25 point each day if you answer half of the questions that day.

Q. What is my best strategy for getting all the points?

Show up for as many lectures as possible, stay awake, and PARTICIPATE!