

BIMM 101 Recombinant DNA Techniques Winter 2015 Syllabus

Instructor: Dr. Tiffany Dunbar tdunbar@ucsd.edu (best way to reach me)

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Office hours: Check calendar on TED for weekly office hour, see me in lab, or by appointment.

Lecture: Mon-Wed-Fri 1:00-1:50 PM (see TED for exceptions) CENTR 105
Lab: Tues-Thurs 12:30 PM- 4:30 PM York 3406 or 3316
 OR Wed-Fri 2:00- 6:00 PM York 4318 or 4332

Learning goals and outcomes: Please see detailed document on TED (ted.ucsd.edu)

Objectives:

- Learn the theory behind molecular biology 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 reading:

1. From Genes to Genomes by Dale (1st, 2nd, or 3rd edition). Electronic versions of the 3rd and 1st editions are available on roger.ucsd.edu. The text is also on reserve in the library.
2. Articles on TED: Additional readings will be posted here.
3. Course website on TED: Check this regularly! The syllabus, announcements, lectures, study guides & practice problems, assignments, lab materials, lab schedule, and calendar (with office hours, due dates, etc.) will all be posted here.

Required Materials - bring to lab each day, required by second day of lab:

1. BIMM 101 Lab Manual from University Readers (universityreaders.com, 858-552-1120)
2. Labcoat (the bookstore has cheap ones)
3. UV blocking safety glasses (also at bookstore)
4. Lab notebook with carbon copies (bookstore or Grove general store)
5. Fine point Sharpie for labeling – get a dark color
6. Calculator – you cannot use a cell phone in lab!
7. Long pants and close-toed shoes (your entire legs and feet must be covered)

Attendance: 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 we will determine. You must be on time for lab; the TAs go over the experiments at the beginning of lab, and quizzes are administered then. If you are habitually late to lab, you will lose 5% from your final grade.

I highly recommend that you attend lectures, as studies and my past experience have shown that your active participation in learning has an enormous impact on your learning.

Grading: There are 500 total points possible for this course. Final grades will be based on your total points as a percentage of 500. The following cutoffs are strictly adhered to. You can check your scores throughout the quarter on TED.

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

1. Quizzes: 40% Starting the week of Jan 12th, there will be a quiz once a week on Tuesdays or Wednesdays at the beginning of lab each week for weeks 2, 3, 4, 5, 6, 7, and 8 (see calendar on TED). Each quiz is worth 5% of your final grade, except for the quiz in week 6 which will be worth 10%. 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. You may only request a re-grade of your quiz if you completed it in pen.

Note: If you come into lab late and miss the quiz, you will receive a zero for that quiz. There are no make-ups for quizzes.

2. Assignments: 30% You will turn in both lab notebook carbons and homeworks, varying in worth and format, that will total 30% of your final grade. Guidelines for each assignment will be posted on TED and due dates will be on the TED calendar. Homeworks must be submitted to Turnitin on TED before the start of lab, and all assignments must be handed within 10 minutes of the start of your lab. Assignments that are handed in late that day will be penalized by deducting 5%, and each additional day a report is late another 5% will be deducted. Although you will be doing the experiments and collecting data with a partner, you must hand in your own assignments, written in your own words. **Copying someone else's homework is cheating (see below). This also means copying from past quarters!**

3. Exam: 30% There will be a comprehensive exam on the last day of lab, either March 12th or 13th, during your lab period. There are no make-ups for the final exam.

4. Lab performance, attendance, experimental success, and participation: Your preparedness for lab, your participation in class, and the quality and success of your experiments will all be considered when assigning your final grade. This will be especially important if you are on the borderline between grades.

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.

Teaching Assistants: Please contact the TA for your section using their email (listed below).

Section	Days	TA	Email
C01	Tu/Th	April Guan	a1guan@ucsd.edu
C02	Tu/Th	Grace Zhu	gzhu@ucsd.edu
D01	Wed/Fri	Zhe (Alice) Li	zh1002@ucsd.edu
D02	Wed/Fri	Phuc Bao	pbao.ucsd@gmail.com

Lab notebook: It is mandatory that you keep a lab notebook, which your TA's will check at the end of every lab for completeness. It should contain the following:

- Date, title, names
- Purpose: objective of the lab in your own words
- Methods: pages of protocol/procedure and any changes you made to it, relevant charts
- Results: all calculations and data you collect
- Conclusions: summarize and interpret results, labeling & location of samples

Policy on cheating: anyone caught cheating (this includes plagiarizing lab reports, cheating on a quiz or exam, 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 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 (I need to know who you are because you have come to office hours, or you have asked/answered questions in class, or talked to me in lab, 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, save your graded quizzes and assignments.