### BIMM 101 Recombinant DNA Techniques Summer I 2012

Lecture: M-Th 12:30p – 1:50p CSB 002

Lab: M-Th 2:00p – 6:00p YORK 4318, YORK 4332

Instructor

Dan Clark dan@ucsd.edu (858) 563-2656 O.H. York 4332 M 6p-7p

TAs

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### **Objectives**

Form accurate mental pictures of molecular biological principles.

Gain proficiency in molecular biological techniques.

Extend analytical reasoning skills and apply them to laboratory results.

Master use of online molecular biology tools.

### **Required Texts**

BIMM 101 Lab Manual from Soft Reserve

Readings on bimm101.com and on BML reserves

### **Required Materials**

(Needed by second day of class – all are available at the bookstore)

Labcoat

UV-blocking safety glasses

Lab notebook (if you do not have access to a copy machine, consider buying a lab notebook with carbon copies).

#### Grading

The scores you earn on all assignments and assessments will be summed (this total will be rounded up to the nearest integer, if applicable). Your letter grade will be assigned according to the table below. Grades can be checked throughout the semester at bimm101.com

Class points
235-250
226-234
217-225
208-216
199-207
190-198
181-189
172-180
163-171
154-162
0-153

# Assignments (125 points)

- 1. Lab notebook (25 points): It is mandatory that you keep a lab notebook. Your TA will do 5 random (strict!) spot checks during weeks 1-4 of the course. The notebook must contain everything you do in the lab, including (for every lab):
  - 1. The date, title and purpose
  - 2. Work performed (including calculations, gel lane numbers, tube numbers, etc.) AND any changes in protocol (if none, refer to the lab manual page number and state "no changes")
  - 3. All data, observations, and results (e.g. what did you see?)
  - 4. Conclusions (Was the lab's purpose accomplished? How can you tell?)

The lab report will cover labs 1-13, and copies of some of the lab notebook pages must be turned in along with the lab report.

- 2. Homework (50 points): There will be 5 homework assignments due throughout the class. Most of the homework will be due at the beginning of lecture on the assigned due date. Some homework will be based on participation on the course website.
- 3. Lab report (50 points): There will be one lab report during this course covering labs 1-13. It is due Thursday, July 26<sup>th</sup> at 6:00 pm or earlier. It must be turned in **via upload to ted.ucsd.edu AND via paper copy** turned in before the close of lab. Although you will be doing the experiments and collecting data with a partner, you must write and hand in your own lab report, in your own words. Copying someone else's lab report is cheating (see below). The lab report will be written in the style of a research journal article, containing the following 7 sections.

Abstract
Introduction
Materials and Methods
Results
Discussion
Acknowledgments
Literature Cited

Early/late policy: Lab reports are due by 6 pm (electronically AND physically) on the 26<sup>th</sup>. Lab reports with paper or electronic versions turned in after the deadline, but prior to 24 hours past the deadline will be deducted 10 points. Reports with a paper or electronic version turned in 24 hours past the deadline will not be accepted. Lab reports turned in electronically AND physically by 6 pm on the 26<sup>th</sup> will be given a 5 point bonus.

- 4. *Quizzes (30 points)*: Three quizzes will be given: July 9<sup>th</sup>, July 16<sup>th</sup>, and July 23<sup>rd</sup>. These will be given at the start of lab, and will be short-answer format.
- 5. Lab attendance/participation (45 points): Your TA will record attendance for each lab, and will be available to assist, train, and monitor you in lab. Each missed lab will result in a 10 point deduction from your lab attendance score, and each lab attended over 5 minutes late will result in a 2 point deduction. Excessive non-participation (late returning from breaks, refusal to assist lab partner, etc.) will result in 2 point per lab deductions at the discretion of the TA.
- 6. Final (50 points): there will be one final exam for the course. The final will consist of 50 multiple-choice questions. This will cover the entire course, and will be administered from 12:30 pm 2:00 pm on August  $2^{\text{nd}}$  in CSB 002. There will be no lab on August  $2^{\text{nd}}$ .

# **Closing Fine Print**

Policy on cheating: Anyone caught cheating (includes plagiarizing lab reports, cheating on a test, or changing an answer for a regrade) will be given an F for that assignment and be reported to the Dean's office. Any second offense will result in dismissal from the course and an F grade.

Maintaining Academic Integrity: Students agree that by taking this course all required papers will be subject to submission for textual similarity review to Turnitin.com for the detection of plagiarism. All submitted papers will be included as source documents in the Turnitin.com reference database solely for the purpose of detecting plagiarism of such papers. Use of the Turnitin.com service is subject to the terms of use agreement posted on the Turnitin.com site.