BIMM 101 Recombinant DNA Techniques Summer I 2013

Lecture: T-F 11:00a – 12:20p SEQUO 147

Lab: T-F 12:30p – 4:30p YORK 4318, YORK 4332

Instructor

Dan Clark dan@ucsd.edu (858) 563-2656

TAs

Leo Lin helloleolin@gmail.com

Phuc Bao pbao@ucsd.edu

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)

<u>Lab coat</u> **AND** <u>UV-blocking safety glasses</u> (must be worn every day in lab)

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

Letter	Class points
A+	467-500
Α	450-466
A-	433-449
B+	416-432
В	400-315
B-	383-399
C+	366-382
С	350-365
C-	333-349
D+	316-332
D	300-315
F	0-299

Assignments (250 points)

- 1. Lab notebook (60 points): It is mandatory that you keep a lab notebook. Your TA will do 4 strict notebook checks during weeks 1-4 of the course. The notebook must contain everything you do in the lab, including (for <u>every</u> lab):
 - i. The date, title and purpose
 - ii. Any changes in protocol (if none, refer to the lab manual page number and state "no changes")
 - iii. Predictions AND/OR results
 - iv. Calculations AND/OR analysis
- 2. *Homework (125 points)*: There will be 5 homework assignments due throughout the class. Homework will be **due at the beginning of lecture** on the assigned due date.
- 3. Lab report (65 points): There will be one lab report during this course covering labs 1-14. It is due Thursday, August 1st at 11:00 am or earlier. It must be turned in **via upload to ted.ucsd.edu AND via paper copy** turned in before the beginning of the review lecture. 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

Late/early policy: Lab reports are due by 11 am (electronically AND physically) on the 1st. Lab reports with paper and/or electronic versions turned in after the deadline, but prior to 24 hours past the deadline will have 15 points automatically deducted from the score. Lab reports turned in electronically AND physically by 11 am on July 31st will be given a 5 point bonus. Reports with a paper or electronic version turned in 24 hours past the deadline will not be accepted.

Assessments (250 points)

- 4. *Quizzes (100 points)*: Ten quizzes will be given: **every** Wednesday and Friday of the course at the beginning of lab. These will be short-answer format, and will each cover material from the previous one or two labs, **as well as** the set-up, materials, and protocol for that day's lab.
- 5. Lab participation (50 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 participation score, and each lab attended over 5 minutes late will result in a 5 point deduction. Excessive non-participation (late returning from breaks, refusal to assist lab partner, etc.) will result in 5 point per lab deductions at the discretion of the TA.

6. Final (100 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 - 2:30 pm on August 2^{nd} in YORK 4318 and YORK 4332. There will be no lab on August 2^{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/assessment 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.