FACULTY **C**OURSE **A**SSESSMENT **R**EPORT

Department of Biomedical Engineering

Academic Year: **2011-2012**
Term: **Winter 2012**

Course Code and Title: **BME 50A Cell and Molecular Engineering**

Instructor: **Wendy Liu, Ph.D.**

Background: Please review the *ABET background* document.

Instructions: For each student outcome performance indicator, identify (1) the assignment (which quiz, quiz problem, exam problem, or project) was used to assess that indicator, (2) the maximum score possible on that assignment, (3) the performance standard for that assignment expressed in points and also as a percentage of max, (4) the number of students who were assessed on that assignment, (5) the average score achieved by them expressed in points and percentage of max, and (6) the number and percentage of BME students who achieved the performance standard.

Performance Indicators (PIs): This course assesses the following Performance Indicators (please consult the *Proposed Remapping of BME courses to Student Outcomes* document): **a2**

a2 — Students can apply knowledge of science to problems in Biomedical Engineering

PIs	Assignment used for assessment	Max. score	PI standard and % of maximum	Number of students tested	Average score and % of maximum	Number and % of BME students who met the standard
(a2)	HW#1 (all)	10	6.67 (66.7%)	96	8.6	90 (93.8%)
	HW#2 (all)	10	6.67 (66.7%)	96	8.9	91 (94.8%)
	HW#3 (all)	10	6.67 (66.7%)	96	7.2	68 (70.8%)
	HW#4 (all)	10	6.67 (66.7%)	96	8.5	85 (88.5%)
	HW#5 (all)	15	10 (66.7%)	96	12.5	78 (81.3%)
	HW#6 (all)	10	6.67 (66.7%)	96	7.7	74 (70.1%)
	HW#7 (all)	10	6.67 (66.7%)	96	7.2	74 (77.1%)
	Midterm#1 (all)	100	66.67 (66.7%)	96	65.3	46 (47.9%)
	Midterm#2 (all)	100	66.67 (66.7%)	96	69.9	54 (56.3%)
	Final (all)	100	66.67 (66.7%)	96	78.0	78 (77.1%)
	Average:					**73.8 (76.9%)**

Course Learning Outcomes: This course assesses the following Course Learning Outcomes (please consult your *Course Outline* document):

CLO1: Students will be able to understand the biochemical composition of cells (EAC a).
CLO2: Students will be able to understand the principles of genetics and heredity (EAC a).
CLO3: Students will be able to understand the molecular machinery controlling gene expression and recombinant DNA techniques (EAC a).
CLO4: Students will be able to apply knowledge of cell and molecular biology to understand developmental biology and approaches in regenerative medicine (EAC a).

CLOs	Assignment used for assessment	Performance standard	Number of students tested	Average score (%)	Number and % of BME students who met the standard
1	HW#1-2, Midterm#1, Final Exam	66.67%	96	79.6%	76.3(79.4%)
2	HW#3, Midterm#1, Final Exam	66.67%	96	71.9%	64(66.7%)
3	HW#4-6,Midterm#2, Final Exam	66.67%	96	78.7%	73.8(76.9%)
4	HW#7, Final Exam	66.67%	96	75.1%	76(79.2%)

What changes did you make in this course based on previous assessment results?

None

What recommendations do you have for improving the course the next time it is taught?

Used randomized seating assignment during midterms and exams to minimize the effect of cheating.

What recommendations do you have, if any, regarding prerequisite courses or other ways to improve student preparation for this course?

None.

Any other recommendations or comments?

None.