

# CELLS and MOLECULES BIOL 1200 - 001 Spring 2010

**Instructor:** Blake Mathys; Office: B-106; phone: (609) 626-6858  
email: Blake.Mathys@stockton.edu

**Office hours:** Thurs 11:15 AM - 2:15 PM *other times by appointment*

**Co-requisite:** BIOL1205 Cells and Molecules Laboratory- any section  
Laboratory sections will meet first the week of January 25th

**Textbook:** *Biology* Campbell & Reece, eighth edition (2008). Benjamin/Cummings  
Text ISBN 978-0-8053-6844-4 ISBN 0-8053-6844-2  
Student package ISBN10: 0321543254 ISBN-13: 9780321543257

**Optional:** Student Study Guide for *Biology*, eighth edition, M.R.Taylor  
Practicing Biology: A Student, third edition, J Heitz & C. Giffen

**Laboratory manual--** in-house printing.

**Course Overview:** Cells and Molecules is the first semester of general biology course required for all BIOL, MARS, CHEM, BCMB majors, some PUBH majors, and BIOL minors. This course serves as a foundation for future coursework in these majors. The course focuses on biological molecules, cell structures, and biochemical processes common to all life forms.

## **Course Objectives**

The course will provide students with the opportunity to:

- Gain factual knowledge of biology terminology and methods
- Learn fundamental principles, generalizations and theories of biology
- Acquire an interest in learning more by asking questions and seeking answers

## **Course Requirements**

### Exams

There will be three exams during the semester worth a total of 50% of your final grade. The Final Exam is cumulative and is worth 25% of your final grade. Please see the schedule for exam dates. The format of the exams will be mostly short answer and multiple choice, although occasional questions that require more critical thinking will be included.

MAKEUP EXAMS are only given in extreme situations. If you experience such a situation and are forced to miss an exam, you must contact me **before** the exam. Email is the best medium, although a phone call is acceptable in such an emergency situation.

### Quizzes:

Four quizzes given on the dates as indicated in the schedule, with your best three quiz grades counting for your final grade. If you are late to class you will **NOT** be given the opportunity to make-up the quiz.

### Homework:

Two assignments will be given during the semester; each person must complete the assignments **independently**.

### **Grading**

Three Exams	50 %	250 pts
Final Exam	25 %	125 pts
Quizzes (Highest 3 out of 4)	15 %	75 pts
Homework Assignments (2)	<u>10 %</u>	<u>50 pts</u>
	100 %	500 pts

A = 92 – 100%	A – = 90 – 91%
B + = 88 – 89%	B = 82 – 87%
B – = 80 – 81%	C – = 70 – 71%
C + = 78 – 79%	C = 72 – 77%
C – = 70 – 71%	D – = 60 – 61%
D + = 68 – 69%	D = 62 – 67%
F = 0 – 59%	

I will provide you with your approximate class grade (based on your performance in class up until that point) on each exam. Even if you are satisfied with this grade, do not become complacent, as the final examination is worth 25% of your grade.

### Attendance Policy

I do not require attendance at lectures; however, I strongly recommend it. Attending every lecture is the easiest and best way to begin your preparation for the quizzes and exams. I will not be making my lecture powerpoint presentations available except during the lecture period. Therefore, regularly scheduled class time will be your **only opportunity** to obtain this information, which will of course be vital to your performance on exams and quizzes.

### Classroom Conduct

Please make every effort to be on time for class. Quizzes will be given at the beginning of the period; if you are late, you will only have the allotted time available to take the quiz, no extra time will be given. If you are so late as to completely miss the quiz, no make-up quiz will be possible. If you must be late to lecture, please strive to enter quietly and with as little disruption as possible. During lectures, I ask that you refrain from using any of the myriad electronic devices available to you, especially those that will result in distraction for other students. If I notice such distractions occurring during the lecture period, I may ask you to cease using the device. If you need to have your cell phone on for some exceptional circumstance (family emergency or something similar), please just inform me and it will not be a problem.

### Academic Honesty

I take academic honesty very seriously. I will make every effort to limit opportunities for dishonesty; however I am well aware that it is not possible to exclude all possibility for cheating. If I detect cheating I will pursue it; please be sure to read Stockton's "Academic Honesty" document.

### Special Accommodations

Students needing accommodations for disabilities should make their request through the Learning Access program.

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Lecture schedule\*:

Month	Day	Date	Subject Material	Chapter	Quiz
Jan	Tues	19	Introduction, Course Overview	1	
	Thurs	21	Molecules; Water	2, 3	
	Tues	26	Carbon; Macromolecules	4, 5	
	Thurs	28	Macromolecules	5	Quiz 1
Feb	Tues	2	Tour of the Cell	6	
	Thurs	4	Cell Membranes	7	
	Tues	9	Metabolism; Review for Exam 1	8	
	Thurs	11	<b>EXAM 1: Chapters 1-7</b>		
	Tues	16	Metabolism	8	
	Thurs	18	Cellular Respiration	9	
	Tues	23	Photosynthesis	10	Quiz 2
	Thurs	25	Cell Communication	11	HW1 due
March	Tues	2	Mitosis; Review for Exam 2	12	
	Thurs	4	<b>EXAM 2: Chapters 8-11</b>		
	Tues	9	Mitosis; Meiosis	12, 13	
	Thurs	11	Mendel and Genetics	14	
	Tues	23	Chromosomes	15	Quiz 3
	Thurs	25	Molecular Basis of Inheritance	16	HW2 due
April	Thurs	1	Transcription and Translation	17	
	Tues	6	DNA and Genetics Review Exercise		
	Thurs	8	Review for Exam 3		
	Tues	13	<b>EXAM 3: Chapters 12-17</b>		
	Thurs	15	Regulation of Gene Expression	18	
	Tues	20	Viruses	19	
	Thurs	22	Biotechnology	20	Quiz 4
	Tues	27	Genomes	21	
	Thurs	29	Review for Final Exam		
May	Tues	4	<b>FINAL EXAM: Chapters 1-21</b>		

\* = Schedule subject to change at instructor's discretion. If changes are made, students will be promptly informed.