CHEM 1810
Chemical Biology
Spring 2015
M W F 3:00-3:50 p.m.
W 4-4:50 p.m. (recitation)
Chevron 154

Instructor: Professor W. Seth Horne
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Office Hours: by appointment
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Course Description:

This course is designed to teach biochemistry from a chemical and molecular perspective. Revolutionary transformations in chemistry and biology have led to a merging at the boundary of these disciplines where contributions from both fields impact our molecular and quantitative understanding of biology. Rapid growth in this area has been driven in part by researchers applying synthesis, quantitative analysis, and theoretical reasoning to the study complex cellular processes.

Course Materials:

Introduction to Bioorganic Chemistry and Chemical Biology (Van Vranken and Weiss)

Some course material will consist of advanced topics from published journal articles. Students can acquire these references online through the university library.

Exam Schedule:

Exam 1	Chapters 1-4	Feb. 11
Exam 2	Chapters 5-6	Mar. 18
Exam 3	Chapters 7-8	Apr. 15

(Exam dates are tentative. Actual dates will be announced in class.)

Grading:

Each midterm exam will count 28% toward the final grade, and in-class quizzes will make up the remaining 16%. Only the highest 4 quiz scores among 5-6 given will be used in determination of the overall course grade. There will be no final exam.

Exam Re-grades:

If you believe that part of an exam was scored in error, you may request that I regrade it. Such requests must be made in writing no later than the next class period after exams are returned. Attach a cover page identifying which problem(s) you believe were scored incorrectly. I will review the entire exam and return it promptly. This is the only mechanism by which an assigned exam grade will be reconsidered.

Academic Integrity:

Students in this course will be expected to comply with University of Pittsburgh's Policy on Academic Integrity (http://www.as.pitt.edu/fac/policies/academic-integrity). Any student suspected of violating this obligation for any reason during the semester will be required to participate in the procedural process, initiated at the instructor level, as outlined in the University Guidelines on Academic Integrity.

Disability Resources:

If you have a disability that requires special testing accommodations or other classroom modifications, you need to notify both the instructor and Disability Resources and Services no later than the second week of the term. You may be asked to provide documentation of your disability to determine the appropriateness of accommodations. To notify Disability Resources and Services, call (412) 648-7890 (Voice or TTD) to schedule an appointment. The Disability Resources and Services office is located in 140 William Pitt Union.

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Statement on Classroom Recording:

To ensure the free and open discussion of ideas, students may not record classroom lectures, discussion and/or activities without the advance written permission of the instructor, and any such recording properly approved in advance can be used solely for the student's own private use.

CHEM 1810 - Chemical Biology
Class Schedule
(tentative and subject to change)
Spring 2015

			3-3:50 pm	4-4:50 pm	Topics
	M	5-Jan	Lecture		Chapter 1- Introduction to Chemical Biology
Week 1	W	7-Jan	Lecture	No recitation	and the Central Dogma
	F	9-Jan	Lecture		Chapter 2 - Chemical Origins of Biology
	M	12-Jan	Lecture		(Reactions, Mechanisms, and Forces)
Week 2	W	14-Jan	Lecture	Recitation	
	F	16-Jan	Lecture		Chapter 3 - DNA Structure and Function
	M	19-Jan	No lecture		
Week 3	W	21-Jan	Lecture	Recitation	
	F	23-Feb	Lecture		
	M	26-Jan	Lecture		
Week 4	W	28-Jan	Lecture	No recitation	
	F	30-Jan	Lecture		Chapter 4 - RNA Structure and Function
	M	2-Feb	Lecture		
Week 5	W	4-Feb	Lecture	Recitation	
	F	6-Feb	Lecture		
	M	9-Feb	Lecture		Chapter 5 - Peptide and Protein Structure
Week 6	W	11-Feb	75-min. exam		Exam 1 - Chapters 1-4
	F	13-Feb	Lecture		
	M	16-Feb	Lecture		
Week 7	W	18-Feb	Lecture	Recitation	
	F	20-Feb	Lecture		
	M	23-Feb	Lecture		Chapter 6 - Peptide and Protein Function
Week 8	W	25-Feb	Lecture	Recitation	
	F	27-Feb	Lecture		
	M	2-Mar	Lecture		
Week 9	W	4-Mar	Lecture	Recitation	
	F	6-Mar	Lecture		Chapter 7 - Glycobiology
	M	9-Mar	No lecture		Spring Break
Week 10	W	11-Mar	No lecture	No recitation	
	F	13-Mar	No lecture		
	M	16-Mar	Lecture		
Week 11	W	18-Mar	75-min. exam		Exam 2 - Chapters 5-6
	F	20-Mar	Lecture		
	M	23-Mar	Lecture		
Week 12	W	25-Mar	Lecture	Recitation	
	F	27-Mar	Lecture		Chapter 8 - Natural Products
	M	30-Mar	Lecture		
Week 13	W	1-Apr	Lecture	Recitation	
	F	3-Apr	Lecture		
	M	6-Apr	Lecture		
Week 14	W	8-Apr	Lecture	Recitation	Chapter 9 - Signal Transduction and Other
	F	10-Apr	Lecture		Advanced Topics
	M	13-Apr	Lecture		
Week 15	W	15-Apr	75-min. exam		Exam 3 - Chapters 7-8
	F	17-Apr	Lecture		