

Chemistry 401 – Topics in Biochemistry

Web site buried in <http://people.reed.edu/~glasfeld/Chem391>

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Office Hours: Mon/Tues 2-3:30 or whenever my door is open.

Meetings: Tuesday 6:10-7:30 in ETC 208

This course is intended to act as an introduction to reading the biochemical literature. The principal activity in the class will be to discuss 1-3 papers per week on a selected topic. In addition there will be in-class presentations and a final paper. The following topics are a plan, but I feel entitled to let my (and your) enthusiasms and whimsy guide us.

Tentative Schedule

Date:	Topic:
9/1	Introduction
9/8	Lipids and self-organization
9/15	Stapled helices
9/22	*Prions
9/29	*Weird DNA
10/6	Olfaction
10/13	DNA as a molecular wire
	<i>Fall Break</i>
10/27	*Playing with membrane proteins
11/3	*Modification of the Cell Surface
11/10	*Chemical control of Cellular Signalling
11/17	Ketosteroid Isomerase (Debate)
11/24	Unusual Flavin Mechanisms (<i>Papers due</i>)
12/1	Unnatural amino acid incorporation

In class presentations

I have suggested weeks (marked with a “*”) in which in-class presentations might be congenial. Each student will craft a 20-minute presentation on a paper that addresses the topic on the list. That paper can be self-selected or on my recommendation. It should be no longer than 6 pages. Three presentations will be made on those days, with time for questions. I will provide additional guidance in class.

Final Paper

The final paper is due on 11/25 (day before Thanksgiving). It will be 2000-2500 words and provide a review of a single research article in structural biochemistry or chemical biology. Comments will be available on those papers by 12/1 and revised drafts will be collected on the last day of final exams.

Evaluation

In this course, evaluation will be based on attendance, participation, the presentation and the final paper. Attendance is expected at all class meetings. Participation means speaking regularly in conference by either contributing ideas or asking questions.