Instructor, Gary Pielak, gary_pielak@unc.edu
Office hours: 4:00-5:00 PM Friday Genome Sciences 3250, or by appointment.

ADD NSF GRAD FELLOWSHIP DEADLINES.
Italic indicates Student Presentations of the cited work.

**Schedule**

**Tuesday** 08-18 NSF GRFP: Introduction: Finding a mentor for grant writing.

**Thursday** 08-20 NSF GRFP: Using chemical literature, Danianne Mizzy & Therese Triumph

**Tuesday** 08-25 NSF GRFP: Ashalla Freeman, Office of Graduate Education, School of Medicine, and NSF Grad. Fellows Annelise Gorensek & Evan Reynolds

**Thursday** 08-27 Amino acids & buffers

**Tuesday** 09-01 Amino acid quiz. NSF GRFP: Instructions, hypothesis writing, letters

**Thursday** 09-03 NSF GRFP: Brainstorming

**Tuesday** 09-08 How to give a talk

**Thursday** 09-10 How to choose a PhD mentor: with Adrienne Snyder

**Tuesday** 09-15 NSF GRFP: Brainstorming, Presentation of ideas

**Thursday** 09-17 NSF GRFP: Presentation of ideas

**Tuesday** 09-22 Simple statistics

**Thursday** 09-24 Standard states, Eyring equation

**Tuesday** 09-29 Steady state enzyme kinetics

**Thursday** 10-01 Enzyme energetics

**Tuesday** 10-06 NSF GRFP: In class editing.

**Thursday** 10-08 NSF GRFP: In class editing.
Tuesday 10-13 Enzyme energetics, continued

Thursday 10-15 No class. Fall Break

Tuesday 10-20 Graduate Student talks on Nobel Prize in Physiology or Medicine graduate student lecture (announced ~5:30 AM on 10-5) & Chemistry (announced ~5:45 AM on 10-7).

Thursday 10-22 Reading papers: Think before you write.

Tuesday 10-27 Reading papers: Lipmann & the Bates hoax, with Richard Wolfenden

Thursday 10-29 Reading papers: Sometimes mistakes lead to insight.

Tuesday 11-03 Reading papers: When it is not a mistake.

Thursday 11-05 Reading papers: How not to deal with mistakes.

Tuesday 11-10 Reading papers: It gets complicated, with Eric Brustad.

Thursday 11-12 Properties of small molecule drugs: Lipinski’s rules of five.

Tuesday 11-17 In class examination

Thursday 11-19 Slack

Tuesday 11-24 Slack

Thursday 11-26 No class. Thanksgiving.

Tuesday 12-01 Last class. Distribute take-home final examination (both closed & open book)

Thursday 12-10 Final exam due before 3:00 PM.
Student Presentations
Each lecture will focus on articles from the primary literature. I will assign one or two students per lecture to present the articles as a PowerPoint presentation. Students should contribute equally. Student may be required to give more than one presentation.

Students develop their presentations with my guidance. Those presenting on Tuesday will meet with me after class the prior Thursday, and students presenting on Thursday meet after class the prior Tuesday.

Presentation should be organized as follows:
1. Background and introduction. Students are encouraged to source additional literature to provide a more complete background on the subject. The introduction should answer the following questions: Why is this important? What was done previously? What are the limitations?
2. Methodology: Highlight the methods that essential to the papers.
3. Critical analysis: Show relevant data from the paper and supporting information. A description of how the data were collected is required. The students should provide a discussion on how the data supports relevant conclusions.
4. Class Discussion

Grading.
Amino acid quiz 5%
Class participation 10%
In class test 40%
Take home final exam 45%

Grades are assigned as follows.
av is the class average. sd is the standard deviation of the mean.
H  >[av + (1.75 x sd)]
P+ >[av + (1.50 x sd)]
P  >[av - (0.50 x sd)]
L  >[av - (1.50 x sd)]
F  <[av - (1.50 x sd)]

Policy adopted by the faculty of the Department of Chemistry on September 9, 1977:
"Since all graded work (including homework to be collected, quizzes, papers, mid-term examinations, final examinations, research proposals, laboratory results and reports, etc.) may be used in the determination of academic progress, no collaboration on this work is permitted unless the instructor explicitly indicates that some specific degree of collaboration is allowed. This statement is not intended to discourage students from studying together or working together on assignments which are not to be collected."
‘How to give a sensational talk’ and ‘Lipmann and “Not strictly biochemistry”’ have been uploaded to Sakai.

References