

Biochemistry Capstone Course, CHEM 4890, Fall 2017, 2 Credit
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Meeting: Wed 4-5:30 PM in ESLC 046 or Widt 330; Fri 1:30-2:20 PM in ESLC053.

Office Hours: By appointment.

Course Goals: This course is designed for senior undergraduate students who are pursuing a BS degree in biochemistry. The goals of this course are to provide training in: oral presentations, literature reviews, and poster presentations. This will be accomplished through a combination of lectures, workshops, reading, interviews, group discussions, and writing assignments. The overall objective of the course is to provide training in areas critical to success in a job or academic pursuit that may not be covered in traditional courses. These topics are essential to success in a biochemistry related job, graduate work, or professional school.

Texts: There is no assigned text for the course. Students are urged to purchase a copy of the book *Elements of Style*, Strunk and White, and *The ACS Style Guide: A Manual for Authors and Editors*, Dodd editor. Both are essential books to have on your bookshelf. Additional sections from books, reviews, and primary literature will be handed out as needed.

Canvas: Information essential to the course will be available through the course Canvas page. This site is found at canvas.usu.edu. Only students who are registered for the class will have access to the course pages.

Grading: This course will be graded based on the points received for the elements presented below (table). Final letter grades will be assigned based on the percentage of the total points possible with the following scale: A's 100%-90%, B's 90%-80%, C's 80%-70%, D's 70%-60%, F below 60%. Attendance at all of the assigned meetings is essential. A missed event can be made up at the discretion of the Professor. Activities required to make-up missed events will be decided by the Professor in consultation with the student. Missing more than two of the events will result in zero points for all missed events with no option for make-up. Assignments turned in after the deadline will have 2 points deducted for each 24 h period late.

Graded Elements: Following are the graded elements (with maximum possible points).

Chemistry 4890 Fall 2017 Points		
Element	Description	Max. Points
Attendance	Attend all assigned class sessions	Required
Seminar discussion	Participate in discussion of papers for seminars (5 points each)	10
Seminar Critiques	Critiques (2 x 5 points each)	10
Assignment 1	Literature assignment	10
Assignment 2	Quick presentation	10
Assignment 3	Topic/paper discussion	10
Assignment 4	Key slides	10
Assignment 5	Presentation to group	10
Assignment 6	Poster to department	25
Assignment 7	Seminar to department	30
Total		125

Assessment: Assessment of the course will be conducted by the online IDEA system toward the end of the semester. Information from the Evaluation will be used to improve the course in subsequent years.

Provisions: This course will adhere to the USU Academic Policies and Procedures Manual found at the web site <http://www.usu.edu/policies/>. Any student with a disability who requires accommodation must contact the instructor. The disability must be documented by the Disability Resource Center. Course materials may be requested in alternative formats.

Chemistry 4890, Fall 2017 Calendar				
Date	Day	Time	Location	Topic/Assignment
9/13	W	4 PM	ESLC046	Literature + Zotero- Assignment #1 – turn in assignment within one week
9/15	F	1:30 PM	ESLC053	Assignment#2- Quick paper
9/20	W	4 PM	ESLC046	Assignment #2- Quick paper
9/22	F			No class
9/27	W	4 PM	Faculty office	Meet with faculty about paper
9/29	F	1:30 PM	Faculty office	Meet with faculty about paper
10/4	W	4 PM	Widt 330	Attend Seminar- turn in critique within one week
10/6	F	1:30 PM	ESLC053	Assignment #3- paper for seminar
10/11	W	4 PM	Widt 330	Attend seminar – turn in critique within one week
10/13	F	1:30 PM	ESLC053	Assignment #3-paper for seminar
10/18	W			No class
10/20	F			No class
10/25	W	4 PM	ESLC046	Assignment #4 –slides
10/27	F	1:30 PM	ESLC053	Assignment #4- slides
11/1	W	4 PM	ESLC 046	Assignment #4- slides
11/3	F	1:30 PM	ESLC053	Assignment #5- Presentation
11/8	W	4 PM	ESLC046	Assignment #5- Presentation
11/10	F	1:30 PM	ESLC053	Assignment #5 - Presentation
11/15	W			No class
11/17	F	1:30 PM	Widt 2 nd floor	Assignment # 6 Poster
11/29	W	4 PM	Widt 330	Assignment #7 Seminar
12/1	F	1:30 PM	ESLC053	Assignment #7 Seminar
12/6	W	4 PM	Widt 330	Assignment #7 Seminar

Communication Intensive

This course qualifies as Communication Intensive (CI) being focused on developing both scientific writing and presentation skills. The assignments described below are designed to allow you to present and write, with feedback from the instructor and your peers. All of the assignments are designed to provide feedback as you develop these presentation skills.

Assignment Overview:

Attendance

Role will be taken and attendance at all of the assigned events is expected as outlined above.

Discussion of Papers, Seminars, and Critiques

You will attend seminars by outside speakers this semester as one way to learn effective presentation skills. For some speakers, we will discuss a paper ahead of the seminar. You are expected to read the paper and to discuss. Points will be given for active discussion. You will attend the seminar and fill out a critique of strengths and weaknesses and turn in the critique on the due dates noted in the calendar. Critiques will be awarded points for careful evaluation.

Assignment 1: Finding and organizing literature

The assignment is meant for you to practice gathering and organizing literature using the major databases and collecting citations and papers using Zotero. Details of the assignment are provided in a separate document.

Assignment 2: Quick presentation of a paper

In this assignment, you will do a quick presentation to the group of a recent biochemistry paper you have pulled from the literature. No formal presentation. The emphasis is on organizing thoughts and presenting clearly.

Assignment 3: Discussion of paper/topic for seminar

In this assignment, you will present the essence of the paper/research you will do your poster and presentation on. No slides. Emphasis is on having a clear story. You will meet with one of the biochemistry faculty to discuss the selection of your paper.

Assignment 4: Key Slides for poster and talk

You will present the key slides that will be the heart of your talk and poster. The format will be slide-by-slide discussion among the group to improve the slides and logic.

Assignment 5: Presentation to group

You will give your 15 min presentation to the group without interruptions to gauge timing and delivery. The group will give critiques following each presentation.

Assignment 6: Poster

You will present a poster to the entire department. Poster details will be provided on a separate assignment description.

Assignment 7: Department Seminar

You will give a formal presentation to the department. Grading will be on clarity of presentation. Grading details are in a separate document.