

**Eastern Oregon University  
Course Syllabus**

**Course Number: CHEM 406**

**Name of Course: Senior Capstone Seminar**

**Catalog Description:**

During this three-term sequence student select and research topics in chemistry. In CHEM 406, students prepare a research paper presenting current research in a self-selected area of chemistry.

**Credit Hours: 1**

**Instructor Information:**

Christopher D. Walsh (he/him)

email: cwalsh2@eou.edu

Office hours: tbd

**Office hour Zoom link:**

<https://eou.zoom.us/j/95070742371?pwd=a2diR3pTbFIkTXRnMDFPZjgrb0FMZz09>

**Class Meeting Time:** W 9:00-9:50 am, BH 146

**Required Texts or Suggested Materials:** none

**Prerequisites:** Students must have at least senior standing or consent of instructor.

**Learning Outcomes:**

At the completion of this course students should be able to:

1. Use academic search tools to locate and access papers relevant to the student's research interests from peer-reviewed journals.
2. Distinguish between primary articles (original research articles, case reports/case series, and technical notes), secondary articles (narrative review articles and systematic reviews), special articles (letters to the editor, correspondences, short communications, editorials, commentaries, and pictorial essays), and tertiary and gray literature.

3. Summarize the research question, hypothesis, experimental design, data analysis and conclusions of original research articles in their field of interest.
4. Prepare and deliver a 5000+ word paper specific topic in current chemistry research, including the summary and analysis of three recent research publications from ACS journals.

**Attendance policy:**

Lecture attendance, participation in group discussions and attending peer presentations are all mandatory. Non-attendance or lack of participation will have a negative impact on your grade.

**Grading Policies:**

Attendance & participation	20%
Class assignments	30%
Final Paper	50%

**General Education Category and Outcomes:**

SMI, GE Outcome in INQUIRY (A general education course introduces students to the heuristic of the discipline, its ways of knowing and processing the world, its forms of inquiry and ways of solving problems) and CRITICAL THINKING (A general education course requires students to develop the habits of mind within a discipline, considering the different purposes and audience for the work within the course, and reveals to students the connections the discipline has with other disciplines).

**University Writing Requirement Outcomes:**

At the completion of this course:

- Students will produce at least 5,000 words (including rough drafts, in class writing, informal papers and polished papers); 2,000 words of this total should be in final research papers which students have revised after receiving feedback and criticism;
- Students will practice the forms of writing and reflect upon the nature of the writing used by graduates and professionals in the disciplines of chemistry and biochemistry;
- Students will write at least one paper synthesizing information from multiple sources, while employing the appropriate documentation style for chemists and biochemists;
- Students will draft, revise, and edit their formal written work. They will also critically evaluate at least 2 other research papers;
- Students will seek assistance from a writing tutor in the writing lab when needed and when referred by the instructor.
- This course must be completed with a grade of C- or better for UWR credit.

**The Writing Center:**

The Writing Center provides a place — physical or virtual — where every EOU writer can find an interested, responsive reader. Writing tutorials are free of charge for EOU's undergraduate and graduate students who are writing for any course at any level, or who are writing resumes, job letters, graduate applications, and more. Go to [eou.mywconline.com](http://eou.mywconline.com) to schedule an appointment in the Writing Center (Loso Hall 234).

**Academic Misconduct Policy:**

Eastern Oregon University places a high value upon the integrity of its student scholars. Any student found responsible for an act of academic misconduct (including but not limited to cheating, unauthorized collaboration, fabrication, facilitation, plagiarism or tampering) may be subject to having his or her grade reduced in the course in question, being placed on probation or suspended from the University, or a combination of these.

**Accommodations/Students with Disabilities policy:**

Any student who feels he or she may need an accommodation for any type of disability, please make an appointment to see me during my office hours or contact the Disability Services Office in Loso Hall, Room 234.

**Syllabus Prepared by:** Christopher D. Walsh Ph.D.

**Date:** March 10, 2022