



Cooperative Education



Cooperative Education I: From Exploration to Offer CHEM 3190 Department of Chemistry and Biochemistry

1. Course Description

This course prepares chemistry and biochemistry students to secure internships or co-op positions through structured career development and applied job-search training. Students engage in self-assessment and career exploration to clarify goals and identify opportunities aligned with their interests. The course guides students in developing professional materials, including tailored resumes, cover letters, and LinkedIn profiles. Through workshops and experiential activities, students practice networking, conduct informational interviews, utilize job-search platforms, and strengthen interviewing skills using the STAR method. Additional topics include offer evaluation, professional communication, and workplace readiness. By the end of the course, students will have a polished professional portfolio and a strategic plan to pursue career opportunities in their field of chemistry and biochemistry.

2. Course Objectives

This course aims to address a critical gap between academic preparation and career entry by equipping chemistry and biochemistry students with structured guidance and practical skills necessary to secure internships and co-op experiences. While students often demonstrate strong disciplinary knowledge, many lack formal training in professional branding, networking, interviewing, and strategic job-search techniques. Accordingly, this course provides scaffolded support from self-assessment through offer evaluation. Students develop tangible professional materials, engage with employers and alumni, and practice authentic application processes. The course also promotes equitable access to experiential learning by demystifying the job search, addressing challenges such as job scams and application fatigue, and encouraging exploration across diverse chemistry- and biochemistry-related industries.

3. Eligibility, Prerequisites, and Registration

- Open to Chemistry and Biochemistry majors
- There are no prerequisites for this course, but it is suggested to complete some chemistry or biochemistry courses
- Students can register for this course the same way as other chemistry or biochemistry disciplinary courses
- In-person attendance is required for this course

4. Key Teaching Components and Best Practices

- Integration with Career Services: Collaboration with the university career center for resume reviews, mock interviews, and access to Handshake.
- Active Learning: In-class application work and workshops are central to the course.
- Storytelling and Skill Translation: Emphasis on articulating transferable skills from coursework, projects, and campus involvement.
- Networking Practice: Students are required to connect with alumni and perform informational interviews.

5. Learning Outcomes

By the end of this course, students will be able to:

- 1) Assess personal interests, skills, and values to define career goals and identify target industries, employers, and experiential opportunities in chemistry and biochemistry.
- 2) Differentiate between internships and co-op experiences and explain their academic expectations, professional requirements, and career implications.
- 3) Develop tailored professional marketing materials—including a resume, cover letter, and LinkedIn profile—aligned with specific position descriptions and career objectives.
- 4) Apply effective job-search and networking strategies by utilizing professional platforms (e.g., Handshake, LinkedIn, company career pages, professional associations), delivering an elevator pitch, and conducting informational interviews.
- 5) Demonstrate effective interviewing skills using behavioral techniques such as the STAR method in both virtual and in-person formats.
- 6) Evaluate internship or co-op offers, communicate professionally in acceptance or negotiation scenarios, and articulate transferable skills and professional development goals that demonstrate career readiness.

6. Course Format and Structure

This is a semester-long course delivered through a combined lecture, workshop, and activity-based format with a strong emphasis on active learning and professional skill development. Rather than relying primarily on traditional lectures, class sessions are structured around guided instruction, interactive exercises, peer collaboration, and applied career-development activities.	Student engagement, participation in workshops, and timely completion of professional development tasks are essential to success in the course.
Each instructional unit introduces key concepts related to career preparation in chemistry and biochemistry—such as professional branding, resume development, networking strategies, interviewing techniques, and workplace readiness—followed by structured, hands-on practice. Students will participate in workshops focused on drafting and revising application materials, conducting mock interviews, engaging in networking simulations, and analyzing job descriptions.	
Peer review and instructor feedback are integral components of the course. Students will provide constructive feedback on resumes, cover letters, LinkedIn profiles, and interview responses, fostering collaborative learning and iterative improvement. In-class discussions and reflective activities will support students in clarifying career goals and evaluating professional opportunities.	
Throughout the semester, students are expected to actively apply course concepts to real internship or co-op searches. Assignments are designed to align with actual career development milestones, including identifying target employers, submitting applications, conducting informational interviews, and preparing for interviews. By the end of the course, students will have completed a professional portfolio and developed a strategic action plan to pursue and secure experiential learning opportunities in chemistry or biochemistry.	