

SCCT 395: Scientific Communication

This course provides a comprehensive foundation in the communicative practices vital to the global chemical sciences. Acting as a bridge between academic study and professional practice, the curriculum facilitates the transition from language learners to expert scientific communicators. Students will cultivate a strategic professional identity by translating laboratory expertise into high-impact resumes and CVs tailored for global research and industry. In addition, the course explores professional etiquette and networking strategies for the international scientific community. Technical modules focus on the structural components of formal research papers—including synthesis of methods, data analysis, and discussion of results—alongside precise abstract writing and data visualization. The course also addresses contemporary challenges such as the ethical integration of AI and the maintenance of data integrity.

Course Objectives

Upon successful completion of this course, students will be able to:

- **Structure Formal Research Manuscripts:** Produce professional-grade chemistry reports by logically organizing experimental context, methodology, data analysis, and scientific conclusions.
- **Synthesize Technical Information:** Write concise scientific abstracts and figure captions that effectively summarize complex chemical data for a professional audience.
- **Develop Data Visualization and Presentation Skills**
- **Build a Strategic Professional Identity:** Translate laboratory expertise and academic achievements into high-impact resumes and CVs designed for the global chemical industry.
- **Uphold Scientific Ethics:** Apply rigorous standards for data integrity and citation, including the responsible and transparent use of Generative AI in the writing process.
- **Deliver Persuasive Oral Presentations:** Deliver a persuasive 60-second elevator pitch and a formal oral presentation, demonstrating the ability to address technical Q&A with poise.

Tentative Syllabus:

Date	Time	Content
June 10, 2025	9:30-12:30 13:30-15:30	The Scientific CV vs. Resume <ul style="list-style-type: none">• The "Skills" Translation• Professional Branding Academic Writing <ul style="list-style-type: none">• The Anatomy of a Paper• Searching the Literature• Scientific Writing Style• The Art of the Abstract• Ethical Communication
June 17, 2025	9:30-12:30 13:30-15:30	Visual Communication <ul style="list-style-type: none">• Poster Presentations• Slide design and data presentation
June 24, 2025	9:00-12:00 13:30-15:30	Oral Presentations Peer Review and feedbacks.