

**Faculty of Engineering****DEPARTMENT OF CHEMICAL & BIOCHEMICAL ENGINEERING****CBE 9100: Advanced Engineering Communications  
Course Outline (Summer 2023)**

**Description:** Effective communication will be required throughout your career to ensure the impact of your work. Such communication will occur in the form of technical reports and manuscripts, grant and scholarship proposals, conference abstracts, presentations to colleagues, clients, and the public, as well as other professional correspondence. The Advanced Engineering Communication Course is designed to enhance your ability to effectively communicate in these different contexts by introducing you to effective written, oral, and visual communication skills. Assignments/evaluations will make use of the graduate student's research data to translate course material into practical use.

**Prerequisites:** Graduate students in Chemical and Biochemical Engineering currently undertaking a research project are required to complete this course and are given priority for enrollment over other graduate students who may enroll at the discretion of the instructors. All participants must have completed an undergraduate degree in a related research area with research experience or with permission of the instructor.

Course enrollment is limited to **20 students**.

**Corequisite(s):** None

**Antirequisite(s):** None

**Course Dates:** From June 7 to July 26

**Contact Hours:** 3 lecture hours, 0.5 course (Wednesdays 3:30 pm to 6:30 pm in SEB 3109)

**Instructor:**

Dr. Franco Berruti, Office: ICFAR, Telephone: 519-661-2111 ext. 88771, Email: [fberruti@uwo.ca](mailto:fberruti@uwo.ca)

**Teaching Assistants:** Maddalena Laghezza, E-mail: [mlaghezz@uwo.ca](mailto:mlaghezz@uwo.ca)

**Graduate Assistant:** Marina Omelchenko, Office: TEB 477, Telephone: 519-661-2111 ext: 88352, email: [cbegrad@uwo.ca](mailto:cbegrad@uwo.ca)

**Course Notes:** Provided by the instructor through the OWL website.

**Required Text:** None

**Useful References**

Communicate Science Papers, Presentations, and Posters Effectively, Gregory Patience Daria Boffito Paul Patience, Elsevier (2015)  
Effective Communication for the Technical Professions, Jennifer MacLennan, Prentice Hall (2003)

**Primary Learning Outcomes**

- i. The development of effective tools and confidence in oral communication.
- ii. Skills in providing and receiving effective/constructive feedback.
- iii. The creation of visuals for oral and written communication.

- iv. The synthesis of knowledge from different sources to create persuasive arguments.
- v. Knowledge of key components and strategies for preparing scientific and engineering documents including: abstracts, executive summaries, technical reports, posters and manuscripts.
- vi. Tools for the preparation of professional documents including curriculum vitae and cover letters
- vii. The analysis of audience and purpose
- viii. Tools for the preparation of short research proposals (e.g., NSERC PGS, OGS)

**Course Deliverables**

- ☐ Short oral presentation
- ☐ Curriculum Vitae and Cover Letter
- ☐ Abstract and Peer Review
- ☐ Selected components of a scientific manuscript and Peer Review
- ☐ Short research proposal
- ☐ Oral Presentation

**Evaluation:** The final course mark will be determined as follows

- o Attendance and Participation: 15%
- o Short (3 min) oral presentation: 10%
- o Abstract and Peer Review: 10%
- o Elements of a scientific manuscript and Peer Review: 10%
- o Short (3-pages) research proposal: 20%
- o Curriculum Vitae and Cover letter: 10%
- o Oral Presentation: 25%

**Repeating All Components of the Course**

In accordance with Senate and Faculty Policy, students who have failed an Engineering course (i.e. <50%) must repeat all components of the course. No special permissions will be granted enabling a student to retain laboratory, assignment or test marks from previous years. Previously completed assignments and laboratories cannot be resubmitted for grading by the student in subsequent years

**Use of English**

In accordance with Senate and Faculty Policy, students may be penalized up to 10% of the marks on all assignments, tests, and examinations for the improper use of English. Additionally, poorly written work except for the final examination may be returned without grading. If resubmission of the work is permitted, it may be graded with marks deducted for poor English and/or late submission.

**Attendance**

Attendance in all lectures, tutorials and laboratories is mandatory. Any student who, in the opinion of the instructor, is absent too frequently from class or laboratory periods in any course, will be reported to the Dean (after due warning has been given). On the recommendation of the Department concerned, and with the permission of the Dean, the student will be debarred from taking the regular examination in the course.

**Cheating**

University policy states that cheating is a scholastic offence. The commission of a scholastic offence is attended by academic penalties, which might include expulsion from the program. If you are caught cheating, there will be no second warning (see Scholastic Offence Policy in the Western Academic Calendar).

**Plagiarism**

Students must write their essays and assignments in their own words. Whenever students take an idea or a passage from another author, they must acknowledge their debt both by using quotation marks where appropriate and by proper referencing such as footnotes or citations. Plagiarism is a major academic offence

(see Scholastic Offence Policy in the Western Academic Calendar). The University of Western Ontario has software for plagiarism checking. Students may be required to submit their work in electronic form for plagiarism checking.

**Conduct**

Students are expected to arrive at lectures on time, and to conduct themselves during class in a professional and respectful manner that is not disruptive to others.

**Sickness and Other Problems**

Students should immediately consult with the instructor or Department Chair if they have any problems that could affect their performance in the course. Where appropriate, the problems should be documented. The student should seek advice from the instructor or Department Chair regarding how best to deal with the problem. Failure to notify the instructor or Department Chair immediately (or as soon as possible thereafter) will have a negative effect on any appeal.

Please contact the course instructor if you require material in an alternate format or if any other arrangements can make this course more accessible to you. You may also wish to contact Services for Students with Disabilities (SSD) at 661-2111 x 82147 for any specific question regarding an accommodation.

**Notices**

Students are responsible for regularly checking their Western email and notices posted on the OWL website.

**Consultation**

Students are encouraged to discuss problems with their teaching assistant and/or instructor in tutorial sessions.

Office hours will be arranged for the students to see the instructor and teaching assistants. Other individual consultation can be arranged by appointment with the appropriate instructor.