
CSCI 5100 Winter 2023
Communicating Computer Science Ideas
Thursdays 1435 - 1725
McCain Arts & Sciences Building, Auditorium A

We will focus on creating the appropriate document or presentation in various situations. Emphasis will be on reducing/removing noise (things that distract from the message) and increasing/adding relevance (things that reinforce understanding of the message).

RATIONALE

Computer scientists must regularly explain what they want to do and why to colleagues, the public, and industry professionals in a global marketplace. This course increases your confidence in communicating ideas and, in turn, increases the confidence of others in you.

LEARNING OUTCOMES

On the successful completion of this course, you will have demonstrated that you can:

- create technical and workplace documents that are of a high professional standard
- give an oral presentation that is clear and persuasive
- communicate effectively in a professional setting

To achieve these learning outcomes, you will show that you:

- know the format and proper construction of routine business correspondence, research papers, technical reports, project proposals, and job application packages
- can summarize longer reports and papers
- can edit your documents for clarity and concision
- can apply graphic design principles to your documents
- work effectively in small groups to write formal and prepare reports and create oral presentations
- understand the importance of voice, body language, and message in a presentation
- can create professional-quality visuals and handouts to accompany a presentation

COURSE LEADERSHIP

Instructor Andrew Cochran - ac@dal.ca (include CSCI 5100 in the subject line)
Office hours Thursdays, 1300-1400, Goldberg Computer Science Building, Room 308
TAs Mikylah Gillis - mikylah.gillis@dal.ca (Head TA)
Vamsi Utlal - utla@dal.ca (Senior TA)
Anjali Chaudhary - an900058@dal.ca
Rahul Macwan - rahulmacwan@dal.ca

IMPORTANT DATES

- First class meeting - 12 January
- Last day to change and add classes - 20 January
- Munro Day (University closed) - 03 February
- Last day to drop without a "W" - 06 February
- Nova Scotia Heritage Day (University closed) - 20 February
- Winter Study Break - 20 - 24 February
- Last day to drop with a "W" - 13 March
- Last class meeting - 06 April
- Exam period - 13 - 25 April

COURSE OPERATIONS

This course is in person.

Students are expected to attend all classes in person. No accommodation is provided to students who are not on campus or do not attend class meetings.

You will be assigned a TA to assist you throughout the term.

Your TA will introduce themselves by email during the second week of the term and indicate the best times to reach them.

You will become part of a workgroup of four to six people.

Workgroups will be pre-assigned. Each group will have a private meeting area on MS Teams and be supported by a TA.

You will receive a coursepack of readings for this semester.

Instead of purchasing a textbook, a PDF file is available on Brightspace at no cost. You may print a single copy for personal use, but no other printing or redistribution is permitted.

We will use online polling software during class meetings (Mentimeter).

Mentimeter is available as a free app or via any web browser (menti.com). A session-specific access code will be shown at the beginning of each class.

Course materials are in two places, *Brightspace* and *MS Teams*.

- **Brightspace is for academic resources:** academic announcements, meeting agendas, assignments, grades, videos, and the coursepack.
- **MS Teams is for social resources:** news for class members, private team channels, *Course Q and A*, and participation areas. See CSCI 5100 | W22. The access code can be found on *Brightspace > This course > Announcements > Join code - MS Teams for this course*

Lectures and related materials are protected by copyright.

Students require the instructor's permission before recording class lectures or using slides or other materials outside the class.

POLICIES FOR THIS COURSE

A. Requirements to pass the course

1. A minimum B- grade is required to pass this course.
2. The aggregate of the midterm and final exams must be >60% of their combined value.
3. The grade conversion scale in Section 17.1 of the Academic Regulations will be used.
4. All end-of-term grades are final.

B. Assignment submissions

1. A grace period of 31 minutes is provided to allow for technical mishaps when submitting assignments. Assignments submitted after the expiry of the grace period (i.e., 2359 + 31 minutes = 12:30 a.m. AT) will not be graded, and the mark will show as 0/F.
2. Your most recent submission will be graded. When one or more submissions are uploaded before a deadline and another is submitted after, the submission is treated as late.
3. Assignment submissions will be filtered through similarity detection software.
4. Assignments may be subject to extra review by the instructor and not published simultaneously with others.
5. If a submission is submitted to a Faculty Academic Integrity Officer (FAIO), it will be published once their assessment is complete.

C. Extensions or accommodations

1. Extensions or accommodations must be arranged before an assignment or exam deadline. They are impossible once a deadline has passed.
2. There are two ways to arrange an extension or accommodation in advance:
 - (1) **Request Dalhousie Academic Support.** They will arrange an advising appointment. Details are online at https://www.dal.ca/campus_life/academic-support/accessibility/accommodations-.html.
 - (2) **Use a Student Declaration of Absence (SDA).** These provide a self-declared notice of absence for up to three calendar days. For example, provided notification of an SDA is filed before the deadline, an assignment otherwise due at 2359 Friday becomes due at 2359 on Monday immediately after.
 - Up to two SDAs may be used in a term.
 - SDAs replace sick notes and cannot be used in addition to absence for illness.
 - SDAs cannot be used consecutively, for example, to create a six-day extension.
 - Details for filing an SDA are online at https://www.dal.ca/campus_life/safety-respect/student-rights-and-responsibilities/academic-policies/student-absence.html.

D. Regrades

1. Individual assignments may be regraded by request when you believe your work has been misunderstood or evaluated unfairly. Note that a regrade is a full assessment of the original submission, and the mark may go up, down, or stay the same.
2. Requests for a re-grade must be after a discussion with the TA/Marker about the reasons for the grade.

3. Regrade requests must be made within ten days of the mark being published and sent by email (only) to ac@dal.ca. Include in the subject line *CSCI 5100 - Regrade request*.
4. Current assignments take priority. Regrades will be completed by the end of the term in the order they were received.

TOPICS IN THE COURSE

We begin by considering the unique challenges and imperatives when communicating CS ideas, then examine methods for optimizing regular communication in professional settings, and end with developing practical skills for specialty situations. Topics discussed throughout the term are as follows:

- First principles: receivers, attention, noise
- The CS information paradox
- Turning workgroups into high-performing teams
- Communication as a cognitive system
- Technical English & message efficiency
- Characters, stories, & voice
- The communication development lifecycle
- Context & relevance
- Overcoming presentation fear
- Understanding & simplification
- Trustworthiness
- Unspoken & inter-personal communication
- Sending & receiving bad news
- Visual communication
- Summarizing & citing information
- Differentiating facts, analysis, & opinion
- Identifying & managing reliable information
- Harmonizing team presentations
- Communicating to persuade

ACADEMIC STANDARDS

Failure to correctly attribute sources in your work will result, minimally, in a mark being reduced; for example, for not using quotes for text taken from other sources, failing to include in-text citations, or omitting correct information in the references.

Overuse of third-party content, even if properly attributed, will minimally result in grade reduction for insufficient originality.

If it appears your submission presents other people's work as your own, such as having substantial similarities without correct quotations, citations, and references, your work will be submitted for review by a Faculty Academic Integrity Officer (FAIO). As part of their investigation, the FAIO will provide an opportunity to talk with them. FAIO findings have a variety of consequences, including course failure.

Note that these academic standards apply to every item submitted to count toward your course grade.

If you have questions about correct practices, ask your TA or consult the resources on proper citation provided by the Dalhousie Writing Center (<https://dal.ca.libguides.com/c.php?g=257176&p=5001261>).

EVALUATION

■ Assignments (50%)

There is a mixture of short and major assignments, plus team assignments. See **Table 1** for dates, tasks, and values.

Table 1: Overview of assignments, classified as short (SA), major (MA), and team (T)

| Name | Date | Task | Value |
|----------------------|--------------------|--|-------|
| T1* (by team) | 16 Jan | Optimizing team performance | 1% |
| SA1 (written) | 20 Jan | Writing for results | 3% |
| SA2 (spoken) | 26 Jan or 2 Feb | Structuring a spoken presentation | 3% |
| SA3 (written) | 06 Feb | Writing in the voice of the company | 3% |
| MA1 (spoken) | 17 Feb | Explaining a complicated concept at three levels of difficulty | 13% |
| T2* (by team) | 27 Feb | Organizing a team proposal | 1% |
| MA2.1 (written) | 9 Mar | Preparing a first draft | 3% |
| MA2.2 (written) | 30 Mar | Delivering an analytical report | 10% |
| T3.1* (by team) | Day before | Harmonizing a team presentation | 3% |
| T3.2 (by individual) | Day before | Presenting with authority | 10% |

■ Professionalism (2.5%)

- Attending and identifying yourself during meetings (using name cards provided)
- Being respectful during meetings, including not talking while others are speaking
- Participating in discussions, during in-person meetings, online, or both
- Responding to an end-of-term questionnaire (instructions will be on the form)

Total value is given from the beginning of the term and reduced when these are not evident.

■ Midterm examination (7.5%)

A midterm exam will cover all course material up to the date it is held.

- The midterm exam will be closed-book.
- The midterm exam will be on 02 March during the class meeting time.

■ Final examination (40%)

A final examination will cover all the material from the term.

- In-person attendance is required; there will be no provision to do the exam remotely.
- The exam will be closed-book and done on paper in writing. Booklets will be provided.
- The Registrar's Office schedules the exam and will post the date on 01 February.

* SDAs do not apply

UNIVERSITY POLICIES

This course is governed by the academic regulations outlined in the [University Calendar](#). Dalhousie University has a clear policy on several important issues. Students are strongly advised to familiarize themselves with these policies.

■ Territorial Acknowledgement

Dalhousie University is located in Mi'kma'ki, the ancestral and unceded territory of the Mi'kmaq. We are all Treaty people.

■ Internationalization

At Dalhousie, 'thinking and acting globally' enhances the quality and impact of education, supporting learning that is "interdisciplinary, cross-cultural, global in reach, and orientated toward solving problems that extend across national borders." <https://www.dal.ca/about-dal/internationalization.html>

■ Academic Integrity

At Dalhousie University, we are guided in our work by the values of academic integrity: honesty, trust, fairness, responsibility, and respect. As a student, you are required to demonstrate these values in all of the work you do. The University provides policies and procedures that every member of the university community must follow to ensure academic integrity. (read more: http://www.dal.ca/dept/university_secretariat/academic-integrity.html)

■ Accessibility

The Student Accessibility Centre is Dalhousie's centre of expertise for student accessibility and accommodation. If aspects of the design, instruction, and experiences within this course (online or in-person) result in barriers to your inclusion, please get in touch with https://www.dal.ca/campus_life/academic-support/accessibility.html for all courses offered by Dalhousie except Truro.

■ Conduct in the Classroom — Culture of Respect

Substantial and constructive dialogue on challenging issues is essential in academic inquiry and exchange. It requires a willingness to listen and tolerance of opposing points of view. All class members must consider individual differences and alternative viewpoints towards each other, instructors, and guest speakers. While expressions of differing perspectives are welcome and encouraged, the words and language used should remain within acceptable bounds of civility and respect.

■ Diversity and Inclusion — Culture of Respect

Every person at Dalhousie has a right to be respected and safe. We believe inclusiveness is fundamental to education. We stand for equality. Dalhousie is strengthened by our diversity. We are a respectful and inclusive community. We are committed to being a place where everyone feels welcome and supported, which is why our Strategic Direction prioritizes fostering a culture of diversity and inclusiveness (Strategic Priority 5.2). (read more: <http://www.dal.ca/cultureofrespect.html>)

- **Student Code of Conduct**

Everyone at Dalhousie is expected to treat others with dignity and respect. The Code of Student Conduct allows Dalhousie to take disciplinary action if students don't follow this community expectation. When appropriate, code violations can be resolved reasonably and informally—perhaps through a restorative justice process. If an informal resolution can't be reached or would be inappropriate, procedures exist for formal dispute resolution. (read more: https://www.dal.ca/dept/university_secretariat/policies/student-life/code-of-student-con.html)

- **Fair Dealing Policy**

The Dalhousie University Fair Dealing Policy guides the limited use of copyright-protected material without the risk of infringement and without seeking the permission of copyright owners. It is intended to balance the rights of creators and the rights of users at Dalhousie. (read more: https://www.dal.ca/dept/university_secretariat/policies/academic/fair-dealing-policy-.html)

- **Originality Checking Software**

The course instructor may use Dalhousie's approved originality checking software and Google to check the originality of any work submitted for credit by the Student Submission of Assignments and Use of Originality Checking Software Policy. Without penalty of grade, students are free to choose an alternative method of attesting to the authenticity of their work and must inform the instructor no later than the last day to add/drop classes of their intent to choose an alternate method. (read more: https://www.dal.ca/dept/university_secretariat/policies/academic/student-submission-of-assignments-and-use-of-originality.html)

- **Student Use of Course Materials**

These course materials are designed for use as part of the CSCI courses at Dalhousie University and are the instructor's property unless otherwise stated. Third-party copyrighted materials (such as books, journal articles, music, videos, etc.) have either been licensed for use in this course or fall under an exception or limitation in Canadian Copyright law. Copying this course material for distribution (e.g., uploading material to a commercial third-party website) may violate copyright law.

- **Learning and Support Resources**

Please see https://www.dal.ca/campus_life/academic-support.html