# **Faculty of Computer Science**

Goldberg Computer Science Building 6056 University Avenue



# CSCI 5100 Fall 2022

# **Communicating Computer Science Ideas**

Mondays 1805 - 2055 Collaborative Health Education Building, Room C170

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

#### **RATIONALE**

Computer scientists regularly need to say 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 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

## **INSTRUCTOR INFORMATION**

Instructor Andrew Cochran - ac@dal.ca (please include CSCI 5100 in the subject line)
Office hours Tuesdays, 1030-1130, Goldberg Computer Science Building, Room 308

TAs Mikylah Gillis - mikylah.gillis@dal.ca (Head TA)

Sarah Moore - smoore@dal.ca (Senior TA)

Vamsi Utla - utla@dal.ca (Senior TA) Anjali Chaudhary - an900058@dal.ca Rahul Macwan - rahulmacwan@dal.ca

#### IMPORTANT DATES

- First class meeting 12 September
- Last day to change and add classes 16 September
- Last day to drop without a "W" 03 October
- Thanksgiving Day (University closed) 10 October
- Last day to drop with a "W" 01 November
- Last class meeting 05 December

#### **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.

## You will be assigned a TA to assist you with any questions 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: course announcements, daily agendas, assignments, videos, and the coursepack.
- MS Teams is for social resources: private team channels, Course Q&A, and participation areas. See CSCI 5100 | S22. The access code can be found on Brightspace > This course > Announcements > Join code MS Teams for this course

Students must have the instructor's permission before recording class lectures.

## **EVALUATION CRITERIA**

# Assignments (60%)

- There are five individual assignments (one in two parts) plus three team assignments (one in two parts).
- · Late assignments will not be accepted.
- Assignment submissions may be passed through plagiarism detection software.
- All assignments are due at 2359 AT. See **Table 1** for dates, tasks, and values.

Table 1: Overview of assignments this term

Name	Date	Task	Value (points)
Written 1	23 Sep	Writing for results	5
Spoken 1	26 Sep or 3 Oct	Structuring a spoken presentation	5
Team 1*	28 Sep	Optimizing team performance	2.5
Written 2	14 Oct	Writing in the voice of the company	7.5
Team 2*	19 Oct	Organizing a team proposal	2.5
Spoken 2	28 Oct	Explaining a complicated concept at three levels of difficulty	12.5
Written 3.1	04 Nov	Preparing a first draft	5
Written 3.2	02 Dec	Delivering an analytical report	10
Team 3.1*	Day before	Harmonizing a team presentation	2.5
Team 3.2*	Day before	Presenting with authority	7.5

# ■ Participation (2.5%)

- · Generally, contributing to the success of the class. Examples are:
  - Submitting completed questionnaires to Brightspace (.75 point each)
  - Correctly answering peer questions in Course Questions and Answers (.25 points each)

#### ■ Midterm quiz (7.5%)

- A midterm quiz will be on 31 October during the class meeting time.
- The quiz will be closed-book.

## ■ Final examination (30%)

- A final examination will cover all the material from the term.
- The exam will be closed book and done in writing. Booklets will be provided.
- The exam is scheduled by the Registrar's Office. The day and time will be posted by them on 01 October.

<sup>\*</sup> SDAs do not apply

#### **ASSESSMENT POLICIES**

- 1. A minimum B- grade is required to pass this course.
- 2. The grade conversion scale in Section 17.1 of the Academic Regulations will be used.
- 3. All end-of-term grades are final.
- 4. There will be a grace period of 31 minutes to allow for technical mishaps when submitting assignments. Assignments submitted after the expiry of the grace period (l.e., 2359 + 31 minutes = 12:30 a.m. AT) will not be graded, and the mark will show as 0/F.
- 5. We use always use your most recent submission for grading. For greater certainty, when one or more submissions are uploaded before a deadline, and then another is submitted afterward, only the most recent submission is graded and the submission is treated as late.
- 6. Individual assignments may be re-graded by request when you believe your work has been misunderstood or evaluated unfairly. Note that a re-grade is a full assessment of the original submission, and the mark may go up, down, or stay the same. Requests for a re-grade must be after a discussion with the TA/Marker about the reasons for the grade. Re-grade 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 Re-grade request.
- 7. Any accommodations or extensions must be arranged before the due date of an assignment or quiz. Accommodations or extensions are impossible once an assignment or quiz deadline has passed. There are two ways to arrange an accommodation in advance:
  - (a) Make a request to Dalhousie Academic Support. They will arrange an advising appointment. Details are online at https://www.dal.ca/campus\_life/academic-support/ accessibility/accommodations-.html
  - (b) Use a Student Declaration of Absence (SDA). These are designed to replace sick notes. They 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. Details for filing an SDA are online at https:// www.dal.ca/campus\_life/safety-respect/student-rights-and-responsibilities/academicpolicies/student-absence.html
- 8. Team marks may be subject to other team members declaring you have contributed your fair share of the assigned task.
- Assignments may be subject to extra review by the instructor and not be published at the same time as others. If a submission is submitted to an Academic Integrity Officer (AIO), it will not be published until the AIO assessment has been completed.

# **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. The content is arranged in four modules (see **Table 2**).

**Table 2:** A tentative list of topics to be covered this term (order may change)

Module	Topics
Ideas in a global marketplace	<ul> <li>First principles: receivers, attention, noise</li> <li>The CS communication challenge</li> <li>Communication as a cognitive system</li> <li>Technical English</li> <li>The communication development lifecycle</li> <li>Characters, stories, and actions</li> </ul>
Communicating value	<ul> <li>Context and relevance</li> <li>Optimizing communication with strangers</li> <li>Improving team communication</li> <li>Overcoming presentation fear</li> </ul>
Communicating complicated information	<ul> <li>Understanding, simplification, trustworthiness</li> <li>Visual and unspoken communication</li> <li>Summarizing and citing information</li> <li>Preparing an analytical report</li> <li>Working with reliable information</li> <li>Harmonizing team presentations</li> </ul>
Communicating for change	<ul><li>Sending, receiving, and escalating bad news</li><li>Persuasion</li></ul>

# **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. Consult the resources on proper citation provided by the Dalhousie Writing Center (https://dal.ca.libguides.com/c.php?g=257176&p=5001261).

Please note that if it appears your submission presents other people's work as your own, such as the absence of quotations, citations, and references, your work will be submitted to a Faculty Academic Integrity Officer, which could result in consequences such as a course failure.

#### **UNIVERSITY POLICIES**

This course is governed by the academic regulations outlined in the <u>University Calendar</u>. 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 in 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