

COMP 6961 Graduate Seminar in Computer Science

Concordia University

Fall 2021

Course Description

COMP 6961 is a graduate course with a PASS/FAIL grade worth 1.00 credits. During the semester, students are required to attend four seminars in computer science (or a closely related domain) and submit the following: (i) one report on a seminar of the student's choosing, and (ii) three abstracts, one for each of the other seminars attended.

Note: During the COVID-19 crisis, physical attendance of seminars is not required. Instead, students can choose from recordings seminars that will be made available on the course Moodle page.

Coordinator

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Eligible Seminars

Any of the following seminars are considered acceptable subjects of the report or abstracts:

- Master's or Ph.D. thesis defenses given in the CSSE or CIISE departments.
- Ph.D. seminars given in CSSE or CIISE.
- Invited research seminars given in CSSE or CIISE, for example by a visiting scientist or visiting faculty member.

When new recordings are posted an announcement will be sent. There may be some delay between the occurrence of the seminar and the posting (raw videos must be cropped/edited).

Note: Thesis defences often occur late in the term, so there may be very few recordings available in the first half of the term. Take that into consideration when planning your time.

Submitting the report and abstracts

Your report and abstracts must be submitted via the **final submission** item on the course Moodle page. You must submit `comp6961-yourname.zip` containing the following files:

- `comp6961-report.tex`: the main report L^AT_EX source;
- `comp6961-report-*. {pdf,png}`: any figures needed to compile your report;
- `comp6961-report.pdf`: the main report pre-compiled as PDF;
- `comp6961-abstracts.tex`: the three abstracts L^AT_EX source, all in a single document;
- `comp6961-abstracts.pdf`: the three abstracts pre-compiled as PDF.

The submission deadline is strict and indicated on the Moodle item. No reports will be accepted after the deadline. Moodle allows re-submissions up until the deadline, so it is highly recommended that you submit draft versions prior the deadline, in case you cannot submit later (e.g., for personal or technical reasons).

Guidelines for the report component

Being able to understand seminars and research papers, and to summarize them for others, is an essential skill for any graduate student. That is true even if your next step is to work in industry, because the best companies need people who can sort through the latest research, and who are able to identify useful ideas early on.

The report is a “deep dive” on one seminar’s topic. The most important quality of a good report is that it clearly demonstrates the student’s genuine understanding of the seminar material. Doing so requires not just an understanding of the seminar itself and the related background, but also an ability to explain the core ideas and results to a general audience, and in a way that does not merely repeat or ‘tweak’ the original material.

The report should represent a substantial amount of work in understanding the chosen seminar material and the necessary background. Researching the report will likely involve additional background reading and references beyond the seminar itself. Remember, this course is worth 1.0 credits, and per Article 16.1.2 of the Graduate Calendar each credit represents a *minimum* of 45 hours of work per student.

Requirements for the report:

- The report must describe *only one* of the four seminars selected by the student.
- The report must be written in L^AT_EX using the `comp6961-report-template.zip` file downloadable from the course Moodle page.
- The report must contain between 9 and 11 pages of content (text, figures, tables) from introduction to conclusion. The frontmatter (cover page, abstract, table of contents, etc.), bibliography, and optional appendix do not count towards this restriction. If you create a page that is mostly blank (e.g., a small figure) it will not count as a full content page.

- The report text must be written by you, in your own words, not copied or transcribed from the seminar.
- The report margins, default font size, and spacing between elements (sections, figures, tables) must not be changed from the defaults used by the template.
- You can use any L^AT_EX package you need, e.g., for math symbols or code listings.
- Avoid statements like “We investigated this. We concluded that.” You are summarizing someone else’s research, so write in a style that makes this clear.

Guidelines for the abstract component

- Each abstract summarizes one of the other three seminars selected by the student.
- Each abstract must be between 200 and 300 words in length. Aim for about 250.
- The abstracts must be written in L^AT_EX and appear in a single document using the `comp6961-abstracts-template.zip` file downloadable from the course Moodle page.

Reasons for receiving a failing grade

The course is PASS/FAIL and so it is important to understand expectations and common reasons for failure. The list of ‘problems’ below is not exhaustive, but if you steer clear of these pitfalls you should be safe.

- **Plagiarism.** Students must be familiar with Concordia’s academic code of conduct and adhere to all rules of integrity outlined therein. A few types of misconduct are outlined below for emphasis.
 - **Text, figures, or results copied without reference.** Since you are writing a report to summarize someone else’s work, it is OK to include quoted text, helpful figures, and examples of experimental results. Each piece of such ‘verbatim’ content must state the original source. If you fail to consistently state original sources, then the authorship of the remaining content (even the content you actually wrote from scratch) becomes ambiguous and can even be construed as misleading. If the report is deemed to be highly ambiguous/misleading about the authorship of content, then that is grounds for an immediate F.
 - **Submitting someone else’s work as your own.** Obviously this is grounds for an immediate F and being reported for academic misconduct.
 - **Patchwriting.** As an example, suppose while doing background research a student encounters the following sentence from LeCun et al. 2015: “Since the 1960s we have known that linear classifiers can only carve their input space into very simple regions.” The student then adds a similar-but-tweaked sentence to their report, such as: “For decades it was known that linear classifiers can only divide the input space into very simple regions.” The student has just committed a form of plagiarism called ‘patchwriting’. The most egregious forms of patchwriting are

not just at the sentence-level but at the paragraph- or even section-level. Please recognize that copying-and-then-tweaking a sentence does not imply understanding of the original material (at least not beyond a grammatical level!), and as such does not achieve the main goal of the report. Patchwriting is an act of plagiarism, and is grounds for an immediate F and report for academic misconduct. It is easy to avoid: *never* copy-and-then-edit a sentence from source material; always read, think, understand, and then write in your own words—problem solved!

- **Report comprises mostly verbatim content.** For some content like figures and experimental results it makes sense to source them from the original material. But the bulk of the report must be your own writing. So, if your report comprises mainly content copied directly from other sources (even if the original source is referenced), then that is not acceptable. If more than 30% of the content is copied verbatim, you will receive an automatic F for having not taken the writing seriously.
- **Report is too short.** You should aim for at least 3000 words of content. There is virtually no way to meet the 10–12 content page requirement in less than 2500 words (even with a few tables and figures taking space). If the report looks short, the instructor will do a word count on the content sections and if it falls below 2500 words you will receive an automatic F.
- **Abstracts too short.** The abstracts must be in the stated word count range.
- **Abstracts copied from original source.** The abstracts must be your attempt to distill and explain the seminar. If you copy an abstract from original sources related to the seminar (thesis, preprint, publication), then that is plagiarism, even if you then modify the sentences—see ‘patchwriting’ above.
- **Report indicates failure to understand the topic.** Choosing a topic that is too unfamiliar or difficult to learn can lead to a poor report. If you fail to understand a topic, you will be tempted to plagiarize because you will have no other option for creating a report, and then you will receive an F and likely be reported for academic misconduct. So, you are encouraged to choose a topic that is either (a) already ‘accessible’ given your background and that of the course coordinator (i.e., computer science) or (b) something you very much want to learn about and will invest significant time.
- **Report is blatantly lazy.** If the report misses easy opportunities to clearly explain the background or problem setting, for example by not including a key figure or key motivating example (with references), or by rambling on incoherently (probably written desperately and in the last minutes), then there is a good chance such reports will fail.
- **Poor English.** Writing clearly is already difficult for native English speakers. It is doubly hard for students for whom English is a second language. However, no matter your background, it is your responsibility to ensure that a native English speaker can correctly parse the language of your report. Concordia has resources to help you improve your writing at the level of English—take advantage! Otherwise, it is impossible for you to demonstrate understanding of the scientific material.

- **Accidentally submitted the template instead.** Be careful which file you upload when submitting!

Getting early feedback

The “all or nothing” aspect of a PASS/FAIL grade can understandably lead to anxiety. It is natural to want an informal assessment from the instructor on whether your report is “likely good enough to pass,” long before the deadline. In order to reduce student anxiety, the instructor will try his or her best to facilitate feedback as follows:

- Send the instructor an email with exact subject line “**COMP 6961 report feedback**” and attach only the PDF of your draft report.
- The instructor may be very busy at the time you send the email, so please allow up to a week for a response, and do not expect detailed comments; this means that, if you send an email the final week before the reports are due, you may not receive feedback at all and so it is better to keep working.
- Understand that any feedback you receive will be preliminary (e.g., will not check for plagiarism) and that a positive assessment does not in and of itself guarantee a pass.

Good luck and may you find a topic you enjoy learning about!