

CS4983 - Technical Report

Project Requirements

Last update: August 31, 2017

Mandatory steps throughout this course

1. Locate a supervisor and a project

It is the responsibility of the student to find a supervisor. Students may have some ideas for projects prior to approaching their supervisors, or they may get some ideas for projects from potential supervisors in their general areas of interest. The project must include the creation of a written report as a major component.

There is significant freedom, as the report may document or be based on a development project that the student does. Or the report may be about a topic, where the project is combining information from several sources and making a critical evaluation. Other styles of project may be proposed (should be approved by the course coordinator). It should be noted that the project cannot be only a synthesis of multiple references. It should contain some part that comes from the student (e.g., a prototype to test some ideas; arguments on a novel way to solve some problem; recommending a solution to a problem based on the assessment of various existing technologies; taking position in a debate and providing supporting arguments; and so forth).

This step must be completed within the first week of classes.

2. Write a proposal

The proposal should be created by the student after initial discussions with the supervisor, and it is due two weeks after the beginning of the term. Both the supervisor and the coordinator should receive a copy. It is likely that at least two meetings with the supervisor will be required, one to choose the topic and area, and at least one to agree upon:

- planned work
- report length and formatting/bibliography style
- criteria for the work's evaluation

The required length for the final report depends on the kind of project, and the length will be specified by the supervisor when the grading criteria are established. Also, the supervisor should specify the detailed format requirements, typically from a publishing house, that are appropriate to the kind of project. Students must follow the detailed format requirements exactly, and this is easiest if the chosen format has a Word or a LATEX template. The formatting of references also needs to be chosen by the supervisor.

The written proposal must include:

- A title page with the student's name and signature, the supervisor(s) signature, the course number/title and the date
- A brief abstract (1 page maximum) outlining the scope and anticipated content of the report. This abstract should contain a minimum of 200 words.
- A schedule with target completion dates for each major phase of the project, as well as estimates of the number of work hours required for each phase
- A Gantt Chart to illustrate the project schedule
- The format for text and references in the report, as agreed with the supervisor
- The criteria for grading, as agreed with the supervisor
- An initial bibliography, normally of 5 or more sources (at least one must be a non-online source)

3. Do the planned work while keeping the supervisor informed

Once the project is defined and agreed upon, the student can start working on it, following the planned schedule as much as possible. It is important that students write down exactly the number of hours actually spent on each phase, and any deviation in the sequence of those phases. Progress should be reported to the supervisor on a weekly basis, and discussion about any unexpected issues should occur as soon as they arise. Do not wait until it is too late to solve problems!

4. Write two progress reports

During the term there are two progress reports to be submitted. The progress reports must clearly describe the extent to which the project is on schedule. More precisely they are to compare actual progress against the currently approved Gantt chart, and they must clearly state whether the project is on schedule. If not, they must identify the phases that are behind, and by how many hours (effort) and time (schedule). A plan for remedial action and a revised Gantt chart will be required. The remedial action needs to be agreed upon by the supervisor, especially if it involves changing the scope and content of the project.

Note that problems with progress that are considered unacceptable by the supervisor will result in penalties toward the progress reports, even if the reports themselves are well written. This means that the mark on progress reports can be re-evaluated later, to reflect problems in progress that are not necessarily identifiable in the progress report itself (e.g., failing to keep supervisor informed of progress weekly or bi-weekly, or failing to report changes in the project).

5. Write a final report

The final report is normally a PDF file generated by LATEX or Microsoft Word, although student and supervisor can agree on other report-creation tools. It is due on the last day of classes. Figures and other graphical elements should be used in the report, where helpful. Great care must be taken to fully acknowledge all direct or indirect sources of information and references. The length and format should be as specified in the proposal. Appendices should be provided only if they are needed to provide background information that the reader (supervisor or other CS professors) might lack. Most reports should not need an appendix; if one is provided, the grading will be based primarily on the style and content of the body of the report.

The report should be written so that it can be understood by any CS graduate or fourth-year CS student. Any concept needed for understanding the report, which would not necessarily be known by such audience, has to be clearly defined in the report.

Early in the writing process, the student should present and discuss an outline with the supervisor. Later, a complete draft of the final report should be submitted to the supervisor at least two weeks before the report is due. The supervisor will normally provide feedback within a week, which the student should take into account while preparing the final submission.

Students are expected to have made full use of appropriate software to check grammar and spelling.

The supervisor may request that the coordinator not consider grammar when grading the final report. This might be appropriate in cases where a student with language difficulty has made extensive use of the supervisor and/or the Writing Centre, in order to make the grammar minimally acceptable.

6. Present your work

The final presentation will use a computer projector. PowerPoint, PDF produced by LATEX Beamer, or Prezi are reasonable choices. Students with laptops should probably use them; those planning to use UNB computers should verify, at least a day in advance, that the presentation works with the software currently on the UNB machine.

The content aspects of the presentation will be evaluated by the supervisor, whereas the other aspects (preparation, organization, and communications) will be evaluated by the coordinator and other faculty members attending the talk.

Presentations are to be 15 minutes, with up to 5 additional minutes for questions. Presentations that go under- or over-time will be penalized.

Normally, the student will invite the supervisor to attend a rehearsal of the talk, to be held at least one day before the presentation. Feedback received from the

supervisor should be taken into account when the student prepares the final presentation.

Other important rules and requirements

1. Expected effort

As a 2-credit-hour course, a total effort of at least 50 hours is expected; 60 hours would be more typical. A report that requires more than 80 hours is excessive. Students must track the hours spent and report on them in the progress reports.

2. Threshold for passing the course

It should be noted that in order to pass the course, the student should have submitted a report that is considered acceptable, both in content and in how well it is written. If this aspect is not minimally acceptable (i.e., passing grade on the related marks), then the student will fail the course, even if the overall mark corresponds to a passing grade when considering other graded work (proposal, progress reports, and so forth).

3. Attending talks

During the term, each student must attend all CS department seminars (if any) held throughout the term. If a student is not able to attend one, an acceptable excuse must be provided.

Additionally, students must attend some public talks (e.g., talks held by departments other than ours in the Faculty of Science, Applied Science and Engineering; talks by the Faculty of CS at UNB Fredericton when videocast to UNBSJ; etc.). The student should refer to the course outline specific for the term, to get information about which talks are acceptable, how many such talks should be attended, and how to prove attendance.

Except for talks held during the last week of classes, a student is required to submit a summary and critique of the talk. The summary should be approximately 200 words and focus on the main point(s) of the presentation. Plagiarism is not permitted, and this includes plagiarizing from the abstract on the announcement of the talk. The critique is based on the presentation, rather than the content. Students need to point out two strong points of the presentation, and identify two areas in which the presentation could probably have been improved. Examples should back up the critique. It is likely that the critique will require the equivalent of eight short sentences: one would essentially need to state each of the strong or weak points, and then one would need to give an example for each.

The talks of all other CS4983 students must be attended, although no critiques or summaries are required.

Critique-and-summary documents should be submitted to the coordinator. Documents with significant grammatical errors will be returned for revision. Documents with other writing problems may be returned, or may simply receive lower grades.

4. Plagiarism

Plagiarism, which involves using others' ideas and words without properly giving credit, is a serious academic offense that is more fully defined in the UNB Calendar (see nocheating.unb.ca). Sources include, but are not limited to, the Web, other students, books and other printed materials. Plagiarism is grounds for failing CS4983 and may result in further academic penalties.

For CS4983, rules about plagiarism and proper citation apply to presentation slides, project proposals, and progress reports as well as to the final report.

It is important to make a distinction between copyright (primarily a legal issue) and plagiarism (primarily an ethical and scholarly issue). Taking ideas or words (copyrighted or not) without giving credit is plagiarism. Properly citing materials (e.g., diagrams) does not protect one from copyright issues, and if one were preparing a public presentation or a thesis, one might also have to get the copyright owner's permission. However, CS4983 reports and presentations are not public; therefore, one should not have to get permission unless planning to make them public (for instance, by posting on a public server).

5. Individual effort and authorized help

Unless clearly agreed to by the supervisor in writing, the project must represent only the work of the student. The only exceptions are automatically allowed sources of technical or writing help. These are the supervisor, the coordinator and the UNBSJ Writing Centre. In this course, it is not necessary to identify help received from these automatically allowed sources. (Do not assume that this holds for other courses.)