

Project guidelines — CO 739, Fall 2025

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The final project is worth 50% of your final grade in this course, and consists of two parts: a report and a presentation on the project. Both the report and the presentation should be at a level that your fellow classmates could understand and appreciate. The project will be graded on

1. Clarity, presentation, and language: Is it clear and understandable? Does it tell a story in a compelling way? Is the report well-written and fulfills scientific standards (e.g. proper citation standards)?
2. Content and correctness: Is the physics/mathematics in the project correct? Is it relevant to the class and to the project topic? Is the mathematics insightful and substantial?

1 Presentation

The length of the presentation is 20–25 minutes.

1.1 Practice presentation

Part of the assignment is to do a practice presentation for a classmate whom I will assign; this is part of the assignment and is graded for completion. Here are more details.

The listener's requirements are to:

1. time your presentation,
2. listen, and
3. provide constructive feedback.

The listener should send the completed report form below to me, cc'ing you, by email to mborinsky@perimeterinstitute.ca, due at the time of the presentation. Make sure your listener does so.

Report form

Name of presenter:

Name of listener:

Date of practice presentation:

Length of practice presentation:

Did the presenter speak in a clear and organized way about the topic?
Did the presenter write in a clear and organized way on the board, or, are the slides well-organized and easy to read?
Did the presenter state and write down at least one definition, fact, or theorem in a mathematically precise way?
Did the presenter state, and write down, at least one example?
Any comments or suggestions for improvement?

1.2 During class

Arrive 5-10 minutes early on your day, so that you start right on time.

Length: 20-25 minutes, with the 25-minute maximum enforced.

Here are my rubrics:

Does the talk demonstrate a correct, thorough understanding of the physics/mathematics presented?
Was there an indication of the context and motivation for the material presented?
Was there a precisely stated definition or theorem?
Was there a well-chosen illustrative example?

Was the presentation accessible and appropriate to the audience?
Did you speak clearly? Was the pace appropriate?
Did you turn to face your audience at points?
Did you pause for questions?
Did you write from top to bottom, left to right, on the board? Was what you wrote thorough and clear? (Or: were the slides well-organized and clear?)

2 Written part

The written part is a 2–4 page paper-type report on the project. If you choose to do only a report and no presentation, the written part should be 6–10 pages long. This must be written in latex. The written part is due by **December 14** and must be emailed to the professor. The intended audience for the report is another student in the class. The report should give an overview on the project. It should include at least one reference to a research paper.