Report on the Student Evaluation of PHYS203, Autumn 2016

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Implementation

The course consisted of blackboard lectures (4 hours per week) and tutorials (2 hours per week). In the tutorials the students were asked to present their solutions of the homework problems on the blackboard. Unfortunately, usually only 2 to 3 students participated in the tutorials.

16 students registered for the course on Mitt UiB. 11 of them participated in the oral exam. All of them passed, with grades between A and C.

Student Evaluation

The study administration sent an email to the students asking them to complete a short online survey. This email was sent only to 12 out of 16 registered students. Only 5 of them participated in the survey. Such a low response rate makes the evaluation unreliable.

Answers to the survey questions (on a scale from 1 to 5, where 5 is best):

1. *Hvordan vurderer du læreboken, kompendier evt. annet skriftlig utdelt materiale?* – 1×3, 3×4, 1×5. In the comments, one student requested a pensum that is independent of suggestions for textbooks. I understand this to mean that the pensum should include a list of topics, which I will provide for the next lecture.

2. *Hvordan vurderer du forelesningene og forelserens arbeidsmåte?* – 1×3, 4×5.

3. *Hvordan vurderer du kollokvier og de ansvarliges arbeidsmåte?* – 2×3, 3×5.

4. *I hvilken grad vil du si at undervisningen (litteratur, pensum, forelesninger...) i emnet har vært i tråd med emnebeskrivelse og læringsutbytte?* – 1×3, 4×5.

Three answers to the open questions *Det mest positive med dette emnet er...?* and *Andre generelle, spesielle eller utdypende kommentarer om kurset eller forslag til forbedringer?* were very positive.

General Evaluation

Most of the students who participated in the evaluation seemed to be satisfied with the lecture. However, the low response rate and the superficial nature of the survey questions limit the significance of the evaluation.

I will explore the following options for improvements.

- More illustrations and examples, as suggested by a student during the semester. Although the potential for illustrations is limited given the subject matter, it should be possible to add some.
- Introduction to group theory, as suggested by another student. This may be discouraging for the mathematically less inclined if it comes right at the beginning, but it may be an option a few weeks into the lecture if the section on relativistic covariance of the Dirac equation is pushed back. Currently group theory is a part of the follow-up lecture PHYS342.
- Change the textbook for the part on relativistic quantum mechanics, since the currently used book by Bjorken and Drell is very old.
- Limit further the use of the "old" picture of relativistic quantum mechanics that involves hole theory and negative energies, and rather present as soon as possible the "modern" point of view based on quantum field theory.