Course analysis for "Physics experiments in research and society, FYSN11" HT 2019

Course responsible: Johan Gustafson

Other teachers: Joakim Cederkäll, Torsten Åkesson, Cord Arnold, Kim von Allmen, Robert

Frost

Number of students registered: 22

Course representative: André Nuesslein

Grades: U - 1, G - 2, VG - 19.

Analysis

I. Summary of the course evaluations

Total number of responses: 8

Short summary of the results: Overall the students were satisfied with the course and gave an average grade of 4.25/5 on the evaluation questions concerning the course in general. Especially, the students appreciated the lectures on written and oral presentations, the research project and paper, and the written proposal project. The concept essays and the lectures intended to relate different fields of physics were less appreciated.

II. Comments and reflections from the teachers

The teachers felt that the course went well and that the students were motivated to take part in most of the activities. As reflected by the evaluations, the essays and lectures felt less positive, although better than previous years.

III. Evaluation of changes since last time the course was given

The course was last given during the spring 2019, but since this was the first time the course was given during a spring term, the number of students was low and the response on the evaluation close to non-existing. The overall feeling was, however, that the course was moving in the right direction, but due to the personal situation of the responsible teacher, especially the exchange of information between teachers and students were not as good as we wanted. Hence, we did not change much, except improving the exchange of information, especially via the web portal (Canvas).

Compared instead with previous years, the course got very bad evaluations for a few years, after becoming mandatory. Again, this was to a large extent due to problems with information sharing and course contents that were not prepared for the number of students that attended once the course was made mandatory. Especially the students thought this was a course in scientific communication, while it was mainly a course using written and oral communication for examination.

Consequently, we have gradually changed the course in order to make the aim of the course clearer, but also by involving scientific communication into the course. Over the past years, the evaluations have become more and more positive, and as mentioned above, the evaluations were mainly positive this year.

The main clear difference from previous years to this is the change of the lectures and concept essay project. Previously, each student was supposed to write about one concept and how it is applied to different parts of physics, while this year, each student was about to describe how each concept applied to his/her research field. In connection to this, the lectures, given by teachers from the involved divisions, were supposed include a deeper discussion about one or two of the concepts, an introduction to the teacher's field of research and a brief discussion of how all the concepts are applied to this field.

IV. Suggestions for modifications and measures until the next time the course is given

We will modify the lectures and concept part of the course such that the lectures are shortened and more focused on the concepts and the essays are replaced by posters. We will keep the peer-review session, now applied to the posters, and add a poster presentation session.

2020-03-23, this course analysis has been put together by Johan Gustafson, Torsten Åkesson, André Nuesslein and Robert Frost.

The course analysis is sent by e-mail to the director of studies: jan.knudsen@sljus.lu.se