Kurssammanställning FYST19 ” Physics and Chemistry of Surfaces” VT 2019

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Betyg: 12 VG, 9 G, 2 U In addition one student got sick.

The exam was calculated based on the result grade from the written exam (2 hours and 45 min long) weighted by 2/3, A written project report (weight 2/9) and the oral presentation of the report (weight 1/9)

Utvärdering

I. Sammanfattning av kursvärderingen

In total we had 24 students in the course. Of these 9 are PhD students, 4 LTH and 11 physics students. The course is offered both at NatFak (FYST19) and at LTH (as EXTP95).

A questionnaire (designed by the course responsible and the student representatives) was filled out by the students at the last lecture of the course. Students were also offered that they could send it by mail to the student representatives (anonymously). 14 out of 24 students answered (58 %)

II. Lärarlagets kommentarer

Based on the student evaluation shown above and the teachers own self-reflection on the course, we conclude the following:

- Overall, the students seems to be happy with the course. The majority likes the mix of lectures and exercises.

- The majority liked the MAX IV visit (with changed format this year, see below)

- This year we typically had 2 hours lectures followed by 1 hour exercises. A number of students would like to have separated exercise sessions.

- Many students find that there is too short time for the exam and too many questions. Looking at the grades the teacher find that the overall result is fair.

III. Utvärdering av förändringar sedan förra kursen

Suggested changes from last year in italic:

- *Next year the organization of the course should be improved, such that the room booking is correct for both course codes.*
  >>> This was solved this year.
- *If I still is unable to add people to Live@Lund myself next year, I plan to use my own homepage similar to what is done in the SPM course. That will at least work.*
  >>> I did an real effort (2 hours of work) to solve all these problems as fast as possible. Worked fine this year, but from a teacher perspective it is disappointing

to use so much time on this. I would rather use this time on preparing my teaching.

- *Next year I plan to remove the small project about experimental techniques and instead add a few lectures to cover this at the very end (i.e. not included in the written exam). The large project will also be introduced earlier so the students will get more time to work with it.*
  >>> As a teacher I fell this worked quite well. I also implemented student-student feedback this year. It worked OK, but next year I should organize this better.
- *As a more fair grading for the course I plan to give 50% for the written exam and 50% for the final project next year.*
  >>> While preparing the course we changed this to 2/3 written exam and 1/3 project. Overall, this worked well and no student complained about this.
- *One student ask for direct feedback on exercises. It would be very good, but it is very time consuming to do this for large class. Next time I give the course I plan to use more time on "good answers" in the problem solving sessions and hand out my written solutions.*
  >>> I had many solutions on the whiteboard this year and full solutions were posted on Live@Lund. Overall, the teachers find that this works well. In addition the students got individual feedback on the written report and the presentation. Something which they appreciated.
- *Finally, small changes to the motivation of each lecture, the diffraction lectures, and the MAX IV visit is planned.*
  >>> I changed the MAX IV visit significantly. Instead of visiting a lot of beamlines, I put focus at the HIPPIE beamline, where the students performed an experiment (as their teacher had beamtime). This worked quite well. It would have been nice with smaller groups, but it is difficult as
- *I also plan to test different forms of active student feedback during the lectures.*
  >>> I never really manage to do anything here.

IV. Förslag till förändringar till nästa kurs

- A number of the students found the exam stressful. One idea could be a 4 hours written exam instead of 2 hours 45 min and making a few of the questions more difficult.
- The students really liked the new form of the MAX IV visit. Next year we should apply for one day of beamtime for this.
- It could be nice with a demonstration visit in the STM/LEED and X-ray lab (Idea of the teacher)
- Some students complain about the 2 hours lectures and 1 hour exercises and would like to separate lectures and exercises. For next version of the course we suggest a "standard week" with 2 x 3 hours lectures (including start of exercises) and 2 hours exercises.

2019-03-04, Written by Cornelia Gustafsson, Klara Novakova, Jan Knudsen, and Uta Hejral,

Sammanställningen skickas till Johan Rathsman