

Kemiska institutionen Lunds universitet

Sammanställning för "Spektroskopi och dynamik Kemb29" VT 2022

Kursansvarig: Jens Uhlig

Övriga lärare: Per Uvdal, Eva Unger

Antal studenter: 29 registrerade studenter

Betyg: 5 st U, 14 st G, 9 st VG, 1 student did not participate

Utvärdering

I. Sammanfattning av kursvärderingen

Totalt antal svar: 13 (of 28 active students)

Over all the students found the difficulty level of the course to be good but felt that it contained a little bit too much material.

In many conversations during the course but not particularly noted in the evaluation was that 60% of the course needed to take the re-exam of a previous course. A clear statement was that until this re-examn not much work outside of participating in the lectures was possible, can something be done here? Level of examination and requirements was seen as fair.

Particularly good:

- The students appreciate the general energy and motivation of the teachers.
- The lectures from Per are seen as particularly pedagogically
- The lectures/seminar/hand-in setup was general positively remarked
- The blackboard lectures were good and particularly the chance to re-watch the lectures was mentioned.
- Got additional feedback from Master students (at the end of their master) that the excel lab has become very useful later.
- Hand-ins (and bonus points) very good and motivating.

Suggested improvement:

- To much time was spend on lab reports.
- Rework the Aspirin lab instructions (refine)
- To many labs in its current configuration, computer labs should be concluded on the laboratory days
- The powerpoint lectures were fast and if errors were present this made it difficult to follow. Formulas should be derived



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- Check flow of lectures in spectroscopy part, Subheadings in electronic spectroscopy part.
- Better literature for Spectroscopy part (identify the specific chapters in Additional literature, otherwise it will not be used)

Participation in and usefulness of the tutorial session and chemphys day seen very spread. Meaning from very good to very bad, from very useful to not useful (since voluntary and not examined that is ok)

II. Lärarlagets kommentarer

The course was challenging this year. Most lectures and seminars were given online, which reduced the general interaction. We felt that this year the delayed preparation was particularly clear.

Labs: we split the computation labs into two and added the "library lab". In parallel with the increased workload of re-examination this produced obviously to much work for the students. All the lab instructions now for the 3rd time reworked by students prior to the lab. The instructions that were taken as challenging was to make a 1:10 dilution of a stock solution before injection. Particular complaints were that no step by step instructions were given, while the goals are clearly formulated. For the computer lab the online version resulted again in a few students working alone and getting lost. It is challenging for this many participants to give individual help. This should solve itself in the next iteration with presence courses.

Lectures/seminars good participation in the seminars and lectures this year. Also 50% took part in the voluntary (student led) tutorial sessions.

The results of the tenta are quite representative of the engagement and the level of understanding, which is encouraging. We tried to lay the computer and library lab very early in the course, which turned out to be counterproductive as the students were occupied with the omtenta.

III. Utvärdering av förändringar sedan förra kursen

The splitting of the lab reports created pressure for the students. The introduction of the library lab was "good to know". The way how we implemented "the students can watch the endnote course" was not optimal. Most students did not use endnote to generate the bibliography. This needs improvement. The flow of the lectures was somewhat improved, but still three lecturers is chaotic and interrupts the flow.

The online groupwork did improve somewhat, but remains challenging. That our PhD students reworked the instructions was not sufficient to make them clearer



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IV. Förslag till förändringar till nästa kurs

Lectures/seminars will be on-site again, which should address most of the concerns. The lectures will be all blackboard and by two teachers only which will address most of the other points in the lectures and seminars.

Per will take the method overview lecture in his part and thus remove the pressure from the electronic spectroscopy.

Combine lab reports for the computer labs.

Aspirin Lab: A student that recently took this course (and is PhD now) will become new TA and refine the instructions. Let the students create a work-flow plan as pre-lab preparation and organize a questioning time before to clarify the instructions.

For the library lab: provide a better introduction for the reference manager. Introduce a flipped classroom and questioning before the actual lab (was after this time). Move the data extraction to the computer lab.

Consider making two computation one in excel and one in python and students choose one. Copy extra parts from additional literature and give more detailed reading instructions for spectroscopy.

2022-05-19, sammanställning är gjord av Jens Uhlig 2022-05-20 discussed with Course Ombud Hannah Lund and Samer Karim

Sammanställningen mailas till utbildningsadministratör Annelie Raimer: <u>annelie.raimer@kc.lu.se</u>