



**LUNDS**  
UNIVERSITET

Kemiska institutionen  
Lunds universitet

## **Sammanställning för "Spektroskopi och dynamik Kemb29" VT 2020**

**Kursansvarig:** Jens Uhlig

**Övriga lärare:** Per Uvdal

**Antal studenter:** 24 registrerade studenter

**Betyg:** 1 st UK, 12 st G, 7 st VG, 4 did not participate

### **Utvärdering**

#### **I. Sammanfattning av kursvärderingen**

Totalt antal svar: 12 (of 18 active students)

The students were over all happy to very happy with the course.

Particularly good:

- Positive energy, enthusiasm and friendliness of both teachers
- Building spectrometer seminar
- Chemical physics day (a day in which the researchers from our division present their science)

Need improvement:

Lab instructions can be clearer

To much information in the course

Per: very clear and structured lectures, good speed and writes everything that is important on the blackboard

Jens: a bit to fast and to much material, further improve structure, does not make clear on the blackboard what is important and what not.

#### **II. Lärarlagets kommentarer**

The course went very well this year. We had a relative homogen group of students that were motivated and a good fraction worked through the material before the lectures. The students still have big problems in critical understanding measured data or performing an error analysis/evaluation. I completely re-worked the spectroscopy part of the lecture and could thus introduce additional material touching MaxIV and ESS in two lectures. Quantum mechanical orbit description was very weak and the students had particular problems in evaluating even simple derivatives in error analysis.



**LUNDS**  
UNIVERSITET

Kemiska institutionen  
Lunds universitet

**III. Utvärdering av förändringar sedan förra kursen**

We completely restructured the spectroscopy part and switched the order when in the lecture series the laboratories are placed. This made them more useful in the lectures from which the kinetics part benefited.

We build a new hands-on seminar in which the students build in groups of two an emission and an absorption spectrometer, which was received very well.

I introduced the usage of a large number of interactive simulations that were used live in the course and tried the implementation of a polls. The first was received really well, the latter was of less use, as the students anyways interact a lot with us.

The lab instructions were improved by two independent students that took this course prior.

**IV. Förslag till förändringar till nästa kurs**

We will change the error analysis in the Aspirin lab from a mandatory point to a task that gives bonus points.

I will increase the number of practice tasks for the seminars in the kinetic section. The students seem to prefer clear practice tasks before interactive study

2020-05-03, sammanställning är gjord av Per Uvdal and Jens Uhlig

*Sammanställningen mailas till utbildningsadministratör Annelie Raimer:*  
[annelie.raimer@kc.lu.se](mailto:annelie.raimer@kc.lu.se)