

## ***Kursrapport***

Termin: VT 2020 Program: Masters Kurs: Materialtillverkning II, 1KB262, 5hp Antal registrerade studenter: 24 Svarsfrekvens: (71%) 17/24 Datum: 2020-05-10	<b>Utfall av examination</b>  Antal examinerade: 24 Betyg U/inte klara ännu: 0 (0 %) Betyg 3: 01 (4%) Betyg 4: 13 (54%) Betyg 5: 10 (42%)
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### **Kortfattad sammanfattning av studenternas synpunkter och förslag**

*(baserat på såväl kvantitativa resultat som centrala synpunkter från studenternas fritextsvar)*

#### **"Starka sidor" enligt studenterna**

- The seminars as a form of examinations were appreciated as the students felt they had to study more, they felt they were well balanced in terms of difficulty and liked the feedback
- The structure and timing of the course was good
- Students felt challenged

#### **"Svaga sidor" enligt studenterna**

- Grading style for the seminars could be better or the form of assessment modified to be balanced.
- Course felt like it took more time than a standard 5cp course. Labs should be shorter.
- Smaller seminar groups

### **Kursansvarigas och lärares kommentarer till kursens genomförande och resultat, inklusive:**

*(i) ev. ändringar som skett till följd av förslag/kommentarer från tidigare kurstillfällen (se tidigare kursrapporter/kursvärderingar)*

*(ii) ev. ändringar som skett löpande under kursens gång till följd av formativa kursvärderingar*

- A main comment from previous years was in regards to the pace of the lectures, that they were too quick. I have addressed this by increasing the number of lectures on specific topics in order to go through the content at a better pace. This year, the students seemed to appreciate/adapt to the content better.
- Another comment was that the seminar questions could be released sooner to ensure that the students have time to prepare. All seminar questions were released in the first week or two of the course. There were no comments on this issue this time around

- Another change that was made based on student comments was in regards to the timing of the lectures, labs and the seminars so that they were more spaced out in time. This managed to be successfully achieved and seems to have been appreciated by the students.

### **Labblärarnas kommentarer:**

*Redovisa här kommentarer från labblärare om labbmomentet på kursen (starka sidor, förbättringsbehov, önskemål osv). Skriv "Inga laborationer" om labbmoment ej finns på kursen.*

Overall, the lab-part of the course went well. It seemed as if the students benefited most out of the synthesis part of the lab-exercise.

Some of the students had a lacking background in chemistry. It required an extra effort from us teachers to help these students get on track. Nevertheless, these students seemed to comprehend the essential concepts after completion.

Some things can be improved for next year:

Buy barium as small pellets. The lab teacher cuts the barium, which is difficult, time consuming, and carries a risk due to the toxicity of the oxide.

We should rethink how to do the ferroelectricity measurement. The equipment we have is old and does not work well. I think that the theory behind the measurement-response is good for the students learning. But the measurement itself is impractical and unreliable. In brief, if we are to continue this part of the lab, we will need new equipment.

### **Förslag till förändringar/kommentar/åtgärder**

The main issues identified this time are: The style of grading in the seminar, the number of people in each seminar, and the length of the course. I propose the following changes:

- I will try including another seminar group to limit the size to 4-5 people to aid with discussions. This will require extra work from me but not too much.
- Since a new version of the textbook was released this year it presents a good opportunity to re-structure the second half of the course which has typically been perceived as too much content and too difficult. I will reduce the amount of reading of the textbook/focus on chapters which relate more heavily on earlier content or on the lectures. This should balance out the workload again.
- The style of grading in the seminars has been identified by myself in previous years and I considered introducing an extra form of assessment for fairness. This will need to be done in a smart way as it is clear that because the students are graded in the seminar, they put in a lot of effort and consequently gain from it. One idea I have is to implement a pre or post-quiz associated with the seminar which will modulate the students marks (by

averaging with the seminar or similar). This should be easily to implement in the new Studium system which I am moving the course over to.

*Namn på de som skrivit kursrapporten, dvs. kursansvarig eller annan utsedd person på institutionen*